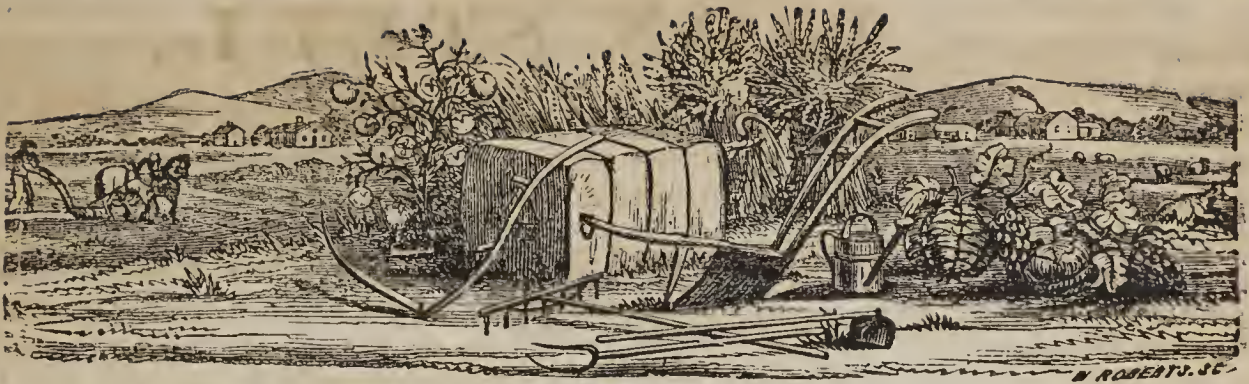


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THE FARMER AND PLANTER.

Devoted to Agriculture, Horticulture, Domestic and Rural Economy.

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For the Farmer and Planter.

"Olla Podrida."

MR. EDITOR:—The "gusto" with which some of your correspondents "pitch in" to the Executive Committee of the State Agricultural Society, makes it evident that their office will not be altogether a "sinecure."

We remember once seeing a fight between Eph. Tate and Sanders Porter—it was a hard one—done up in the old fist and skull style before bowies and revolvers made their advent. Sanders got the worst of it, and his friends gathering around him after it was over, were asking him divers questions. Why didn't you catch him by the hair, Sanders? Why didn't you poke him under the ribs, Sanders? Why didn't you bite his fingers, Sanders, when he was trying to gouge you? and throw him with

the hip lock, said another. "Well, boy-o-ys," (Sanders sorter stuttered), "boy-s its d—d e-e-asy for by-stand-ers to make observations."

"Rigmarole" has made out a pretty strong bill of complaints vs. the Executive Committee, and we propose to weigh them in his own balances.

It was a great inadvertence on the part of "Rigmarole," to charge the Committee with a desire to exclude every thing but the fancy breeds, and in the same breath to sweep off all but the scrubs for exhibition. The owners of Durhams, Devons, Ayrshires and Brahmins, are as much members of the State Agricultural Society, and citizens of the State, as those who luxuriate in scrubs, and have a right to a place in the picture. They believe that an improvement may be made by introducing improved breeds—they have paid out their own money for the experiment, and have certainly a right to exhibit the results—no one is obliged to buy or believe in the "fancies."

Would Kentucky or Tennessee have arrived at the highly improved breed of animals they possess, by sticking to the scrubs? The object of the Society is improvement by comparison, by competition. This can only be done by inducing the owners of different breeds to come forward to an exhibition.

An animal that may suit the tastes of Rigmarole, and the "surroundings" of Potts Cove may not please a salt-water or Piny Woods man. Rigmarole may think no cow is worth having but a dun mooly, and salt-water may have as strong a fancy for sleek Durham.

It is the fashion to sneer at fancy breeds—an argument can be answered—a sneer can not;

but we will put this question to Rigmarole and the whole scrub fancying family—Where ever they have found an animal of fine size predisposed to take on fat or yield more milk or butter, have they not been able to trace it to some "good stock"—some old stain of the fancy? No man in South Carolina has done the State more service in the improvement of the breeds of domestic animals, than Col. Hampton; his liberal distribution throughout the State, of the improved breeds, can be traced by the most common observer. If the best breeds of scrubs then be crosses or grades, the scrub fancier has two chances to any other fancier's one, for he can come in as a grade and as a native. Rigmarole seems to be impressed with the idea that form and blood is nothing—fat, milk and butter are the only things, sought for—these more properly belong to the butcher and the dairyman.

"Rigmarole" seems to have a mortal dread of a "Brahmin." We know nothing of their merits, but can speak much for their being beautiful and attractive. No animals at the late Fair attracted as much admiration. It matters not whether there be three Brahmins or three Brahmin owners in the State—if they have merit, let it be tested by exhibition and comparison.

Rigmarole says, "one-sixth of the premiums are offered for native sheep, and five times as many for imported and foreign varieties. But how is this rewarding sheep to show whether any sheep can be made profitable in South Carolina." Well, that question is for the farmer to answer—it is not the province of the Society—the Society place before the farmers of the country all the most approved breeds, and say, gentlemen, here they are, select for yourselves what is best adapted to your wants.

"Again, there is twenty-four premiums offered for hogs, and they are all for foreign fancy breeds." Ah, indeed. Rigmarole's spectacles need wiping. What is this—"for the best Lincoln, Yorkshire or other large breed, &c.; or this, for the best Boar of any breed," &c. Are Natives and Grades a distinct genus? If "Rigmarole" turns up his nose at a Cashmere, what would he do at a regular Billy?

We are not a believer in Cashmeres, but if they can be made to produce a fleece by crossing on the common goat, even worth as much as common wool, it will be doing a great deal, and as Rigmarole seems to have the fear of dogs before his eyes, he should be the last man to object to the trial.

If Rigmarole's theory is to be carried out,

that premiums are to be offered only for the fat things of the scrub race, the Fair will be any thing but an improving exhibition. We go there to see something better than we have at home—to learn something by observation.

If any thing gave eclat and success to the late Fair, it was the exhibition of stock. We heard gentlemen who had been at the Northern Fairs, express their astonishment at our display of cattle particularly.

Rigmarole seems to be partial to the "*argumentum ad hominem*." How many Morgan or Canadian horse owners are there in South Carolina? How many Morgan or Canadian horses in the State, and what proportion do they bear to the common Skew Ball, White Stocking scrubs in the country? Have their qualities been tried, and are they adapted to our climate, work, mode of treatment, &c.?

The same may be asked of every new thing, animal, implement, seed or fruit. "*Cui bono*," says the utilitarian, pile on the corn crib, make your animal fat—that's the main thing—this gabble about improved breeds is all humbug.

Now, to settle the matter, "if gentlemen who own" dun moolys, brindles, or any of the descendants of the "cow with the crumpled horn," think that those breeds are superior to Devons, Darhams or Brahmins, let them bring them forward, we pledge ourselves that they shall have a premium—if they deserve it. The writer of this article does not own a thoroughbred animal of the cow kind, but he knows some practical people who get a gallon of milk from 15 scrubs, and he knows a good old lady who has taken from a Durham 20 quarts a day. We are free to admit there is a great deal in the keep, but experience has taught us that there is something in the blood.

"Have the Executive Committee the right, or should they have the right to reverse the decision of a Committee of Judges?" If the decision of the Judges should not be in conformity with the regulations of the Fair, the Executive Committee certainly should have the right. If the Executive Committee had followed the suggestions of all the "Committees of Judges," it would have kept the people for two days listening to divers suggestions, and bankrupted the Society by giving discretionary premiums.

The Executive Committee is the only responsible portion of the Society we can address—complain to and abuse *ad libitum*. Every thing is on their shoulders, and they must make the best of it.

In the footsteps of "Rigmarole," next with

stately step comes a writer over the classic soubriquet of "Agricola," whom we are somewhat puzzled to understand. He professes to be a progress man, in favor of agricultural education, an Agricultural College connected with a department of fine arts, where boys can be taught how to draw as well as spell a



and in the next breath he bounces off on reliable facts and less theories, newspaper puffing hothbuds, Cashmere Goat wool, Devon, Durham and Brahmah, Suffolk, Essex and Berkshire *men*—not hogs—great philosophical principles, stubborn truthfulness of premises, and the rational of verbal demonstration, and winds up by a gentle insinuation that the Executive Committee is the mere propagandist of humbug "in following the fashion in arranging their premium list, instead of studying our wants and offering such premiums as will elicit the truths we need most." Why did not these gentlemen enlighten us at the annual meeting?—that was the time.

Now, Mr. Editor, so far as our observation has gone, all the improvement in agriculture in any of the States where State Agricultural Societies and Fairs have existed, has sprung out of the exhibition of fine stock—fancy animals, if gentlemen will have it. People love spectacles—all the world will turn out to see a show—the most obstinate old foggy can be struck by a fine animal—hundreds would be excited by such a scene as every day may be witnessed on the Fair Grounds, and improved by it—who would sleep soundly in the cushioned seats of the Legislative Chamber, over the most instructive essay, report or speech in the world.

Have the Fairs done nothing for Georgia? She can boast of an Agricultural Professorship liberally endowed by a spirited Agriculturist, Dr. Terril, and filled by one of the best Agricultural Chemists in the country. She can boast of an able agricultural periodical well sustained, and crammed always with useful information. She can boast of improved stock, an improving and improved agriculture and agricultural intelligence. Has Alabama done nothing? The subscription list of the Cotton Planter, which was almost "*in articulo mortis*," after the Fair, ran up to nearly 6000, and her watchword is, onward. Has North Carolina, Virginia, Maryland, Kentucky, done nothing? We certainly see things in very different lights. The Executive Committee cannot be expected to please everybody, they will doubtless commit errors—and, we take it, will have enough to

answer for without getting up imaginary evils. But we beg gentlemen to remember that, as Sanders Porter said when he got whipped, "it's d—d easy for bystanders to make observations."

HOTCH POTCH.

For the Farmer and Planter.

"Chinquepin Ridge" and Climatology

MR. EDITOR:—We read generally to acquire information, and particularly so when we read an agricultural paper. It was with this intent that we to-night took up the May number of the "Farmer and Planter," to peruse the few articles we had not read, or had but hastily scanned at its first arrival. Under this latter head came the article by "Chinquepin Ridge," on climatology. To-night we have given this article an attentive reading, and are yet unable to say what the writer aims at.—When he says that "Science reveals that every change in the atmosphere or surface of the earth result from the play of natural forces, and are under unerring and positive law," he ventures to assert that it is upon this revelation, "we may safely conclude the weather in common with all creation, to be under the government of a supreme intelligence," we would simply ask him, when did science ever reveal the existence of a supreme intelligence?

The knight of the "Ridge" talks a great deal about "adverse operations!" What does he mean by such an expression? It must be one of the technicalities of science. Is it an "adverse operation" that to-day, the 19th of May, is a cold, damp, disagreeable day, and is quite pleasant in doors by the fire? If so, then we understand him. Nor is he any the less incomprehensible when he says that science proves that "always when a meteoric condition obtains, corresponding results will certainly be produced." An acquaintance with these "meteoric conditions," must be the polish complete of the science of farming, for surely we have never yet ascended that high in the agricultural scale.

He pretends to say that science "claims to understand the perturbing influences which bring about the apparent adverse operations." If such be the case, why did not science foretell the singularly "adverse operations" of the weather during this spring? Science could not foretell it, but can now account for it. So can we, but our cause is not a prime cause. We know that as invariably as the wind came from the North, we had a cold spell of weather, and we suppose this was caused by the intensely cold weather and the amount of snow and

ice at the North. But can science (we can't) tell us why the weather was so cold there, or why so much snow fell there last winter?

If we are indebted to science for our knowledge of the "forces of nature," what are these "forces" which enable us to increase our productions? Is one of them "the scientific meteorologist?" If so, the other two must be virgin soil, and a plenty of manure, either of which we prefer to the "base of all climatology."

Mr. Chinquepin advises all farmers to make observations on the temperature of their homes. Well, this much we have done for the past four years, and the sole benefit accruing to us is, the gratifying our curiosity in comparing one season with another. Neither our notes nor the "indigenous plants and trees have read off" to us this year "the meteoric conditions;" or if they have, then we don't want any such "conditions" soon again, for we have had corn nipped by the frost, and our cotton now looks like it had the jaundice.

Mr. Editor, we intended to give you a word on "weeds," as our experience is so contradictory to your theory, but as Mr. Ridge says, "the farmer is interested in the life status of a grain of wheat or corn, but for all this wonderful dormancy of condition, all would be lost," we must lay down our pen and look about if we have not omitted some duty to our wheat or corn, lest they be attacked by one or the other of these two diseases; for surely "life status" and "dormancy" must mean the rust or the boll worm. Don't they?

Yours, truly, PERKINS, JR.

For the Farmer and Planter.
Fish Raising.

MR. EDITOR:—I hope you will again allow me the use of your valuable journal, to make public some facts in connection with fish raising, that have "turned up" since the publication of my last article. I have been in doubt for some time whether a trout would breed at one year old, and although I had enquired of several persons who had lived in a trout country all their lives, I was unable to find one who could give a positive opinion, some being for, and others against the fact. I have, however, solved the matter satisfactorily and beyond the possibility of a doubt. You will recollect that in my last article I mentioned the fact, "That last spring" (which was, this very month, a year ago)," "I brought somewhere between three and five hundred trout from Orangeburg, which

were very small," and which I knew were not more than two or three weeks old. Well, sir, I will now state that those same fish have bedded this very month, and that I not only saw them in the very act of bedding, but I have since seen swarms of *little ones* vigorously pursuing their prey in the shape of animalcule and smaller fish; and further, that I have never known a trout caught in Mill Creek (upon the head waters of which my pond is situated), and that there is not a trout in ten miles square around my pond excepting such as have been procured from it. So in view of the above facts, I do not hesitate to say that a trout will bed at one year old. Now, Mr. Editor, such being the fact, what prevents every man who owns one acre of land with a spring or branch on it, from having at least an occasional mess of fish, with a very small outlay of labor or cash. Suppose his pond was not suitable for propagating fish, could he not do as I am told they do in China, where in some instances their ponds are very small, not more than ten feet square, viz: procure the fry or eggs every spring, and place them in his pond to grow and fatten. I look upon it as a fixed fact, that all kinds of fish grow more on a given amount of food than any other members of the animated kingdom. As regards the transportation of eggs, my experience is as yet limited. I brought up from Orangeburg (this month) a breems nest, the eggs were partly hatched; however, when I found it, I succeeded in getting several of the young in my pond, and have no doubt that if the eggs had not been partially hatched and consequently more easily damaged in bringing, I would have succeeded in depositing nearly all safe in my pond. I have frequently brought eggs from my pond and hatched them in a glass jar on my mantle piece. I have hatched the eggs of the maw mouth perch (eggs that were freshly laid) in four days in the house in jars of water. More anon.

Yours, COLUMBUS.

Winsboro, S. C., May, 31st, 1857.

Which are the best Breed of Fowls?

MR. EDITOR:—As I have for some time past turned my attention more particularly to my fowls than I have previously done, I find I have a great deal to learn concerning the raising of chickens yet. Will you give us an article on raising fowls, and which of all the various breeds are the best, and what crosses would make the hardest chickens? Yours, T. McN.

May, 23d, 1856.

REMARKS.—Will any of our correspondents who have experimented with the different breeds of fowls,

give the desired information? From our limited experience we are inclined to stick to the old breeds, or at any rate not to go beyond a cross with some of the not over grown popular varieties.—Ed. F. & P.

Action of Gypsum on Organic Manures.

BY PROF. CAMPBELL, OF S. C.

Certainly one of the most important questions with the farmer, especially in the older States, is this—"how may fertilizers be best obtained, and made most profitable?"

Soils that have been long under cultivation, must necessarily become deficient in many of the elements of fertility, unless the exhausted supply be restored from time to time by proper applications. Without this restoration, farming would soon become a profitless business.—Labor cannot bring from a soil what is not there. When you wish your horse to do long and faithful service, you feed him well; if you do not, strength soon fails, and whip and spur are insufficient to revive his drooping energies. So, plow and hoe are equally inefficient in reviving the energies of a starving field. Economy in sustaining or restoring the strength of soils, is no less important than economy in feeding horses and cattle. But, as an abundance of such nutritious feed as may arise from the products of home culture is most economical in feeding stock, so the free application of home made manure, well collected and well kept, is the most economical of all fertilizers. The farmer who goes abroad to buy guano, while he leaves at home masses of manure, from which wind and rain are rapidly carrying off some of the very same elements that give to guano its value, is not acting more wisely, than he who leaves his hay to be drenched with rain and bleached by the sun, while he goes out to buy oats or barley to take the place of hay in his winter's feeding. Let what you have be made as available as possible; then, if more is needed, it will be time to begin to look abroad for it. After all proper means have been resorted to for collecting and preserving your barn yard, stable and hog pen manures, ashes, soapsuds, &c., you can better afford an occasional ton of guano for the sake of an extra crop of wheat, and a succeeding "fair set" of clover.

In collecting fertilizing materials for farming purposes, two leading objects should be kept in view:

1. To prevent, as far as possible, any loss of value in the material during the interval elapsing before it can be conveniently applied to the soil.
2. To increase its value, if this can be done profitably.

My present wish is to state briefly, that which others have stated before, but in a different form—what careful experience dictates as the most efficient means of attaining both the objects.

I am well aware how little confidence farmers, generally, place in chemical theories and laboratory experiments, before the claims have been fully established by the unerring test of practice. Hence, for the satisfaction and benefit of those whom it may concern, I have just

concluded an experiment of laboratory, crucible and retort—an experiment, involving nothing new or remarkable in the eye of one familiar with the principles of chemical science, yet, important in its practical bearing. It was concluded as follows:

A barrel was filled with fresh scrapings from the stalls of horses. Over the manure, as thrown in, a little ground plaster was sprinkled from time to time. After the barrel had been compactly filled, it was allowed to stand some weeks, until it had gone through the heating process, found always to take place when newly collected manure is thrown into heaps. But during this heating or fermentation, (as it may with propriety be called,) there was none of that "vapor" of strong odor which ordinarily arises from fermenting manure heaps. When the mass had become cool, clean rain water was passed through it and collected at the bottom of the barrel. This water was found to contain one of the elements* of plaster, and one of the volatile substances (carbonate of ammonia) above alluded to. On emptying the barrel, a white powder, looking very much like plaster was found mingled with its contents. But, when tested, this powder was found to contain only one of the elements of plaster; while it contained also one element of the volatile carbonate of ammonia just mentioned.

In order that those who are not familiar with the principles of chemistry may understand the foregoing experiment and fully appreciate its results, a little explanation is necessary.

The volatile matter which escapes so rapidly from heaps of manure, and the presence of which is perceived by its odor about stables where horses are fed, is called by chemical writers "carbonate of ammonia," consisting of carbonic acid and ammonia combined.

Plaster (gypsum) is, according to chemical nomenclature, a sulphate of lime; i. e. sulphuric acid and lime combined. Liebig says, "carbonate of ammonia and sulphate of lime (gypsum) cannot be brought together at common temperatures without mutual decomposition.—The ammonia enters into combination with the sulphuric acid and the carbonic acid with the lime, forming compounds which are not volatile; and, consequently, destitute of all smell."—Thus, we get two new compounds; namely, carbonate of lime in very fine powder, and sulphate of ammonia, which is not volatile, and of course not liable to be lost in the same way, as carbonate of ammonia. The sulphate, however, is readily dissolved in water. Hence, in the experiment above detailed, it was carried out in solution by the water passed through the mixed mass of plaster and manure.

What points, now, are illustrated by the results of this experiment? First, that ground plaster sprinkled about stables and fresh manure, as it is collected into heaps, will arrest the escape of a most valuable portion of the fertilizing matter. Secondly, that if this manure be left unsheltered from the rain, the sulphate of ammonia generated by the action of the plaster

*"Element" is not used here in its strict chemical sense.

will be washed away; and, thus, the sulphuric acid and ammonia, both of which are highly valuable as fertilizers, will be lost.

What has been said above applies equally to all animal manures, and all decaying organic matter from which carbonate of ammonia is set free.

The proper course, then, to be pursued in the management of such manures, is entirely obvious. They should be thrown together in a convenient place—sprinkled with plaster as they are thrown up, and carefully sheltered from the rain until they can be conveniently applied to the soil.

If the farmer who buys guano while he leaves his stable and yard manures exposed, would expend the cost of a single ton of guano in constructing shelters for these manures, he would, in a few years, realize in their increased value, the worth of ten tons of the imported manure with all its remarkable properties.

[*Southern Planter.*]

Influence of Woman.

I lay it down as an axiom, that women rule the world; and it therefore becomes very important that they should be thoroughly educated and cultivated, as that nation is the most civilized and best governed which contains the best educated and most cultivated women. I would not so undervalue your understanding as to flatter you; and on the other hand, if I express any sentiment which may be construed into condemnation, I trust you will give it a general and not a personal application. There is a superior degree of refinement and delicacy in the female sex, which must always command the respect and admiration of man; and if those natural advantages are properly improved by education and cultivation, they must, and always will have, an overwhelming influence in controlling the destinies of a country. The first and most lasting impressions of the child are imbibed from its mother, and therefore how very necessary that she should be thoroughly educated and cultivated, that these impressions which generally exert such influence over the future prospects of the child, should be of such a character which will elevate and properly direct the rising faculties and impart those lessons of wisdom, which will thus be most indelibly fixed on the memory. Show me a highly educated and intellectual mother, and I will show you intelligent children. In addition to these first impressions of the mother, the character of men will be gradually influenced by a cultivated taste and refinement in the young women. Woman was always designed by Providence as the equal of man. Her ardent affection, her kind sympathies, her intense feeling, her acute perceptions, and her noble struggles in adversity, certainly exhibit her superiority over man in a moral if not in a physical point of view. Education and refinement will teach her to give full scope to those high natural qualities of heart, and render her government one of persuasion rather than opposition, of kindness rather than anger, of affection rather than displeasure, as she will learn that man's love,

through which she can alone control him, can only be retained by the perfect confidence which he places in her love and devotion; for if man cannot place implicit confidence in the friend of his bosom, where can he find in this selfish world a true friend? The education of woman should be equal in every respect, to that of the man; for they must be their first instructor in infancy, and are their best and truest advisers in manhood. I would not interdict young ladies from studying all the polite accomplishments of life, provided it is not done at the sacrifice of the useful but they are greatly mistaken if they suppose that these fashionable accomplishments can only carry them through life, smoothly and happily. How many regret, when it is too late, that they did not devote more attention to the acquisition of usual information and knowledge of those branches which are absolutely necessary in the every day-business of life.

The time occupied by many in reading all the miserable novels which are published, could be much better employed in studying the history of some of those noble old Roman mothers, or of some of our revolutionary matrons; for in those days, as there always must be, there were great and illustrious women as well as men. Then, character made the lady, now the mantua-maker does it. The fashions are frequently made to conceal some natural deformity in the person of the originator of the fashion; but still it is blindly followed by all the votaries of this goddess, whether it becomes them or not, forgetting the golden rule, "beauty when unadorned is adorned the most."

It is frequently asked what has become of the race of great statesmen, and in reply to this question, I would ask what has become of the race of mothers of great statesmen? As well might you attempt to excel your beautiful mountains by the erection of sand hills, to imitate the roaring Niagara by damming the Monacacy, as to raise a Washington or Hamilton from the artificial and fashionable bellies of Paris or New York. If you ask what has caused these great changes, I reply, the corrupting influences and enervating influences of city life. In the days of those great men there were no large cities to intice, with their thousand temptations, the young from the substantial realities of life, to engage in all the voluptuous dissipations and follies which are incident to a life in crowded cities. Such a life withdraws man from the high destiny which he was destined to fill, and make him a mere bartering machine; and such a life does not, my young hearers, produce that happiness and independence which can be found in a country life.

[Extract from an address of Mr Calvert, before the Maryland State Agricultural Society.]

Raising Horses.

Our correspondent H., of last month gave our readers an excellent article on the horse.—He lays down one principle of which we would give a single illustration which years ago came under our observation. He states the principle thus, "In order to a perfect developement in the

foal of the mare should be relatively larger than the horse." The reason he gives for this doctrine is thus stated: "The mare being large and roomy there is ample space for developing in the foetus the full powers of the horse in an eminent degree, giving it remarkable strength, activity and constitution."

As to the truth of the above statements we have nothing to say here further than to state a case.

My father once had a large fine mare of good make, speed, disposition, spirit and powers of endurance, used for many years as the family horse. She was a noble animal, seldom surpassed in all her excellencies, though of the common blood. Anxious to preserve her qualities, after she was somewhat in years, he raised two colts from her. The first was from a large, heavily and loosely made horse, relatively larger and coarser than the mare. The colt was a mare, coarse, lazy, flabby, without apparently one quality of its dam. It was sold at four or five years old for forty dollars.

The second was from a very active and muscular horse, a great trotter, very spirited and ambitious, relatively smaller and finer made than the mare. The colt was a mare, small and very cleanly made. It was but one year younger than the first colt. The two were raised together and had no particular care. At five years old the younger and by much the smaller one, was sold for seven hundred dollars. No country often produces a finer or faster animal. The case of these two colts sustains the statement of our correspondent, but whether it is from the principle he lays down we pretend not to say.

It is well, we judge, to give it an extensive trial. There are laws for breeding horses, as fixed as those which hold the planets in their course. If we can discover and obey them we can raise just such horses as we choose.

[Valley Farmer.]

Cooked Food for Hogs and Cattle.

Why cooked food should be so much more nutritious for man or animals than that which is uncooked, has furnished matter for some enquiry among the observers of nature. That it is so, every intelligent farmer, we believe, is willing to admit. From a number of accurately conducted experiments it has been ascertained that a given quantity of corn meal made into pudding or mush of a proper consistence will make nearly as much pork as twice the same quantity of meal fed uncooked. In some countries of Europe where food for man and animals is scarce, food not only for hogs is cooked, but even the meal that is fed to work horses and oxen is made into bread and is broken up and fed with hay and straw.

It has long been known to those who feed cattle or horses that ground food will go further than that which is unground; for this reason we see that wheat bran and shorts are readily bought up at the flouring mills at prices far exceeding their relative value, by analysis, when compared with oats or corn. With the present improvement in flouring mills the "offal" is left

with but a very small percentage of the more nutritive portions of the grain in it, yet what it does contain is so readily available that it is digested with comparatively little loss, and the animals fed on it appear to thrive so well, renders it in great demand. A knowledge of these facts have led many of the most intelligent farmers to supply themselves with suitable mills for grinding the grain they feed to their stock.

The introduction of the iron corn and cob mills, which require no expensive machinery to run them, has brought them within the reach of every farmer and into very general use; and although they only crush, or but imperfectly grind the corn, for a certain class of stock, there is evidently great economy in their use; yet, if the same corn was ground to the fineness of common meal, the advantage, derived from it no doubt, would be double that from the corn which is only crushed.

Why is it that the crushed corn for stock is better than that which is whole? We answer—because, while it is minutely divided it is more readily and effectually acted upon by the digestive fluid of the stomach, a larger portion of it is rendered available for nutrition; and the finer the meal is ground the more of it will be digested and assimilated and converted into flesh. Yet even corn when ground into fine meal and fed uncooked to healthy animals is not all digested, but a large portion of it passes off and is lost.

The fact is clearly proven, and the cause illustrated why cooked food is so much more valuable than that which is uncooked by the researches of Berthollet, Dumas, and more lately by Raspail who has devoted much time, aided by the best microscopical instruments to the discovery of original nutritive particles in food and the changes they undergo in the process of preparation for nutrition.

According to this philosopher the nutritive matter in grain or roots, is composed of, or rather is contained in minute smooth white globules, differing in size in the different grains or roots. Thus in wheat they are 2-100 parts of an inch; in the potato double this size—while in buckwheat they only 1-10,000 part of an inch in diameter. Pure flour or starch would seem to be but a mass of these globules in their natural state. Raspail ascertained that these minute globules consist of an envelope and an inclosed kernel, constituting the nutritive matter. The globules are *insoluble or unalterable in cold water, but require a heat of 122° to expand the kernel and burst the envelope*, yet at this degree of heat the substance is not decomposed. It is these coating envelopes that constitute the starch of the laundry. The investigations of these philosophers seem to have established the following facts as stated by Raspail:

"1st. That the globules contain flour, meal, or starch, whether contained in grain or roots, are incapable of affording any nourishment as animal food until they are broken.

"2d. That no mechanical method of breaking or grinding is more than partially efficient.

"3d. That the most efficient mode of break-

ing the globules are by heat, by fermentation, or by the chemical agency of acids or alkalies.

"4th. That the *dextrine* (the nutrient part) which is the kernal, as it were, of each *globule* is alone soluble, and therefore alone nutritive.

"5th. That the envelope or shells of the globules, when reduced to fragments by mechanism or heat, are *insoluble and therefore not nutritive*.

"6th. That though the fragments of these shells are not nutritive they are indispensable to digestion, either from their distending the stomach or bowels, or from some other cause not understood, it having been proved by experiment that concentrated nourishment such as cane sugar, essence of beef, or osmazome, cannot long sustain life without some mixture of coarser and less nutritive food.

"7th. That the economical preparation of all food containing globules of fecula, consists in perfectly breaking the shells, and rendering the kernal of dextrine contained in them soluble and digestible, while the fragments of the shells are at the same time rendered more bulky, so as the more readily to fill the stomach."

That great advantages are derived from cooking meal for stock, we think these facts and hundreds of experiments that have been made clearly demonstrate; and the only question that presents itself for consideration is, whether the saving in grain by cooking is equal to the labor and expense of the operation. Two points must determine this question; first—the market value of grain, and second—the perfection of the apparatus for cooking and feeding. At the present price of corn (and we have no reason to suppose that it will ever permanently be less) we believe it will be found that there will be a saving of at least *twenty-five per cent.* in cooking the grain fed to hogs.

Steam will be found the most convenient and economical agent for this purpose. The process is simple and comparatively cheap. A vat or steam box, and an ordinary steam boiler supplied with gauge cocks and a safety valve will constitute the apparatus for cooking. These in capacity, must be in proportion to the number of animals to be fed. Meal sufficient to feed two hundred hogs, for a day, can easily be cooked at one time. The boiler should be arranged so that it can be readily supplied with water. The vat can be made of plank and secured firmly together with frames around each end and keyed up so as always to be tight; it should be so situated that the slop could be drawn off into cooling vats, and from these directly into the feeding troughs. The steam is conveyed from the boiler into the vat through an iron pipe, one inch in diameter, this should pass into the box at the bottom and make several turns, each running nearly the whole length of the bottom, the end of the pipe should be closed, and in the top of the pipe that is within the vat, small holes should be drilled three inches apart for the discharge of the steam.

Portable Steam Engines are now coming into use to considerable extent among the larger farmers, taking the place of the horse powers for threshing and are also employed for grinding corn, cutting hay and straw, breaking hemp, sawing wood, &c. On any considerable farm

they will be found cheaper than horse power for any of these uses. One of these engines may be employed to the best advantage in steaming food, when the steam is not required to run the engine. Under this arrangement the whole fixtures for all the power required for performing these various offices, as well as the cooking, may be secured at comparatively low rates.

When we began this article, it was our design to give the whole plan and dimensions in detail of the apparatus, but this is unnecessary, because any mechanic who is competent to do the work can plan it. We will, however remark, that the greater the capacity of the steam vat, with a boiler in proportion, the less fuel will be required to cook a given quantity of food.

We are gratified to learn that Samuel H. Clay Esq., of Bourbon county, Ky., is now conducting with great accuracy an experiment of feeding in several pens of hogs on cooked meal, cooked corn and on corn uncooked. He uses two of Motts' large agricultural furnaces, and of course the experiment will require more labor than if a more perfect apparatus was employed. We visited Mr. Clay's farm not long since and saw the several sets of hogs he is feeding. He had not then weighed them, but the experiment promises so satisfactory, that he intends to put up a complete steaming establishment for cooking food for his entire stock of hogs, which now number several hundred. We have the promise of the result in full when the experiment is completed, when we shall take pleasure in laying it before our readers.

We understood while in Bourbon, that Brutus J. Clay, Esq., is so well pleased with the prospect resulting from this trial that he is making preparations to change entirely his method of feeding his cattle.

From the South Carolina Agriculturist.

Report on Cotton to the Newberry Agricultural Society.

This great staple, which is continually increasing in importance, and ascending step by step with gigantic strides, has well nigh attained that high position which has been claimed for it, that "Cotton is King." Its influence is felt everywhere, in every department of trade, in commerce, in politics in Government, and in every branch of human pursuit. It claims and possesses a direct or indirect power, and thus it is that "Cotton may be called King." A few years ago, its production was only a bantling, a small speck in the agricultural horizon. Who would have believed thirty-five years ago, that the productions of the then insignificant but now great staple should have increased from a few hundred thousand bales to equal to five millions of bales, as compared with the size of bales then packed for market? It has gone on gaining power; developing the resources of our country, building our railroads, canals, ships, steamboats, and in fact, every enterprise, either north or south, east or west, owe their success, in some way or other, to cotton; and, notwithstanding the rapid and unparalleled increase in production, the price has with a very few exceptions steadily paid the producer remunerating rates.

Unlike any other production of agriculture, time and experience has shown, that cotton possesses the singular characteristic of creating its demand. It is a singular fact, and worthy of important note, and a fact too that has never been satisfactorily accounted for in the commercial world, and, we believe, it has never been attempted by any other class, save commercial men, that the more cotton produced, the higher price is obtained for it. This fact has been fully demonstrated by all the largest crops that have been produced, that higher prices have been universally the result, unless effected by extraordinary counterbalancing influences, such as war or revolutionary disturbances.

The present crop, is likely to be the largest ever produced in the United States, will doubtless reach four millions of bales, and yet we see fair upland ruling at the high figures of 12 cents per pound. This part of the subject might be discussed at great length. We shall, however, content ourselves at present with the above facts, leaving our agricultural friends to deduct from it whatever of truth or interest it may contain. Another view of the subject presents equally strong points upon almost the opposite premises, and which, to my mind, is the most reasonable and most probable to take place. It is the following:

It is a fact undeniable, that there is but a small portion of our globe, upon which cotton can be successfully grown; and when we take into consideration the rapid annually increasing consumption of this great staple, and the absolute circumscribed limits of the culture, is it not reasonable to suppose, that within a very few years, the consumption will have gained so much upon the production of cotton, that the world will be astonished to find, that they have as yet known nothing as to its true value? I repeat, then, that the strong probability is much in favor of a very large increase as to price even within our day; and, should we be spared the lot of three score years and ten, to see the ruling rates of cotton quite as common at from 15 to 20 cents, as are the current rates of to-day and of last year. So much then as to the probabilities of the course of prices—now as to the mode of culture, best seed, &c; and,

1st. There can be no general rule that will apply to the cultivation of cotton; for what will suit one year, will not suit the succeeding one. Much, very much, depends upon seasons. But the successful planter must make showers and sunshine all subservient to his mode of operations.

2d. If a farmer will watch his crops closely, he will soon ascertain what soil suits best for the successful culture of cotton, and what sort of manures, and the quantities, &c., suit certain soils the best.

It is known to most of my acquaintances that I cultivate the poorest land, and that I have, perhaps, been one amongst the successful cotton planters of the district; and, whatever success I may have attained, I attribute to a close observation of the soils and manures most valuable to those soils, and best adapted to the culture of cotton. My experience is, that the

gray sandy soil is best adapted for the reception of guano, and will give back to cotton a greater per cent, than other kinds of manure.

My plan is to prepare my lands well by thorough deep plowing, and hedding high. About two weeks before I am ready to commence planting, I prepare my guano with equal parts of charcoal, and then open a deep narrow furrow, depositing about 150 pounds of the mixture of guano and charcoal per acre. This I cover up with light furrows, until ready to plant, then open and plant my seed, which I do about the 1st to 20th April, and cover with the ordinary board or harrow, or with the forked plow, if the land is sufficiently smooth to admit of it. The distance of rows is the next matter, that depends entirely upon circumstances. The calculation should be made as to the probable size of the stalks, with a view that the bolls should only slightly interlock, when grown, so as not to be too much crowded, nor yet so wide apart as to be a waste of ground. Next, as to proper culture. This is, also, a difficult task, as that depends very much upon the season. The most important matter that I have ever found in the cultivation of cotton, is the first hoeing or chopping out; and my conclusions are that, as soon as the cotton is up, and of sufficient size, say three or four leaves, it should be chopped through, leaving four or five stalks in a bunch, about twelve inches apart—followed next by the plow. After you get over your crop in this manner, turn back and thin out to a stand, leaving one stalk in a hill. On this plan I have succeeded on the poorest sandy lands of Newberry district, in making regularly every year 800 to 1,000 lbs. per acre. After it is cut down to a stand, the plow does pretty much the balance of the work. I vary the different kind of plows as circumstances may dictate. I believe, though, the bull-tongue or scouter to begin with—and afterwards the old fashioned shovel and sweep—answers the best general purposes. As to how late cotton should be worked, depends also upon contingencies; some seasons cotton should be worked very late; and then, again, this plan would prove disastrous. The same reasons and remarks may apply to topping. We, therefore, can only be governed by circumstances.

Picking should be commenced as soon as a hand can pick from 60 to 100 lbs. per day, and followed up closely, so as to gather it before being stained or injured by bad weather; and, in order, too, to obtain good prices early in the season when prices are always the highest.—Great care should be taken in ginning, and properly packing. Every farmer who makes ten bales of cotton should have a good gin of his own. The fine short-toothed gin is much the best, as in ginning it does not cut or injure the staple. Next, good gunny bagging should be procured, and have your cotton well baled, say with six good ropes. The bales should weigh not less than 400 to 450 lbs.

In the proper place, I have omitted to mention the best kind of seed. There are so many varieties of seeds, it is difficult to say which is the best; but my experience is, that the pure

Pettit Gulf is the best variety for our section. The Boy's Prolific has been recently introduced into this district, and yields finely, but I am of opinion that it is only an improved species of the Pure old Pettit Gulf.

JOHN P. KINARD,
Chairman.

The Children.

Never treat children unjustly, do not because they are children forget that they have rights; you cannot expect them to regard the rights of others if you infringe theirs. Many kind, ever indulgent people do not seem to think how quickly a child is sensible of unjust treatment.

Respect their right to their own little possessions as scrupulously as you would an older person. Insist that among themselves they shall remember the difference between mine and thine, and while instructing them both by precept and example to be obliging, preserve the right of the owner to refuse as well as to lend. Many a time I have seen the lesson in accommodation, given only to gratify the selfishness of a child who ought to have been made to understand that he could not have what belonged to another, merely because it pleased him. If Harry and Willie dispute the ownership of a string or a marble, do not let it go on because you are too busy to see to it, till it annoys you and then "*settle the matter*" as I've heard mother's say, by declaring that neither of them shall have it, and put it in the drawer or work box to be the prize of the most cunning. But examine the question and render justice.

Never blame or punish a child severely for that which is the result of the accident. You loose the weapon required for more serious faults. Let them feel that your grave reproofs are for those things which are morally wrong, not for what is only inconvenience to yourself. It is a sad thing to see a child whipped for breaking a pitcher, and scarcely reproofed for deceit. The moral education is earlier begun, more important, and more difficult to correct, if wrong, than anything else. Better less embroidery on the darling's dress, than that the soul suffer, better that your own collars may be plainer, mother, and your table less luxurious if you lack time for training the little ones.—*Exchange*.

From the New York Journal of Commerce.

The Habits of Shad.

BY ROBERT L. PELL.

Shad spawn on gravelly bottoms. They will never deposit their ova on a muddy or movable surface, as they know well that they would not adhere. Young shad on their way to the ocean are rarely seen on soft ground, but only in the vicinity of gravel bottoms and a rocky shore. I have seen hundreds of thousands passing down the Hudson in the months of July and August. Old shad commence ascending Southern rivers in February and March, and the Hudson and Connecticut rivers in April, May and June, coming directly from the deep sea in

large shoals, searching for spawning ground and immediately after operation, swim with great rapidity near the bottom towards the ocean, and if taken, are found thin and unfit for the table. Full shad, when they leave the sea, migrate to spawn beyond brackish water, and usually continue up the stream if the bottom is suitable, until they are prevented by a dam or similar obstruction, which they never attempt to overcome, as salmon do. The young shad from spawn deposited by the April run of spawners, when returning down the Hudson on their way to the ocean in August, are about the size of large herrings. If our fishermen were experienced, they might meet the shoals at Sandy Hook immediately on their arrival from deep water, and shorten the distance daily towards the spawning ground, by which means a vast number that now fortunately escape to spawn, would be destroyed.

There is no satisfaction, however, in enlightening this class of citizens, who are so selfish to look only to present gain, and are unwilling to spend half an hour at the end of the fishing season to plant the spawn of a dozen shad each of which would produce fifty thousand fish towards the next year's supply. I have endeavored to induce our State Legislature to pass a law, making it incumbent upon all fishermen so to do; but have not been successful. If this plan were pursued for five years, our rivers would again teem with this delicious fish, as they always return, directed by instinct, to spawn where they were born. Some years since, in my vicinity on the Hudson, two thousand shad were taken at a single haul of the seine, where now it is rare occurrence to entrap three hundred. This fact plainly shows, that if the present destructive system is pursued, the supply will soon fail to meet the demand. Two years since, I artificially impregnated the ova of shad. Thus: having partially filled a pail with water, I took a female immediately from the river, in my left hand, and stripped her gently with my right, when the ova, some fifty thousand in number, were forced into the pail. The spermatic fluid of the male was then in the same way caused to drop in the same pail, and when thoroughly mixed together, the color of the ova changed from a glowing red to a beautiful straw color. They were then placed under fine gravel at the inlet of one of my breeding ponds, and running water was permitted to pass over them. At this time my microscope only indicated a single cell in the egg, containing a straw colored fluid. Forty days afterwards the microscope exposed to view thousands of different sized cells partially filled with blood.—Two days afterwards I plainly saw eyes.—Within a week thereafter, thousands of young shad made their appearance, with small appendages attached to their bodies, but I could not discern with my glass either mouth or gills, but the blood vessels and heart were plainly seen. The eyes were large, and the pectoral fins well developed. At the age of thirteen days the anal, dorsal and caudal fins, devoid of rays, could be seen without the microscope, as well as the gills and mouth. At this period the sack disappeared, and they attempted to eat; were

very lively, and concealed themselves when any person approached.

I have also caused old shad to spawn in a breeding pond, and kept them healthy by an occasional application of fine salt. Their progeny became fresh water fish.

Fecundated ova of the famous English sole white bait, tench, carp roach, dace perch and jack, wrapped in flannel cloths, and packed in boxes of damp moss for me, were lost in the ill fated Arctic. I intended to plant the ova of the salt water fish in the little bays formed by the Hudson River Railroad, and have made arrangements with Monsieur Coste, of Paris, and Monsieur Millet, of the French Society Zoologique? Acclimation, for another shipment during the present season.

I offered the Legislature of the state of New York, at its present sitting, through the medium of Senators Kelley and Fardon, to stock all the waters of the State with salmon at my own expense, if they would pass a law for the preservation of the fish until they should become well established in the different waters; but want of time will probably prevent its passage.

The growth of salmon has been thoroughly proved in the Scotch fisheries, by marking the fish. The young fry in four months time between the period of leaving their birth place for the sea, and their return to spawn, have increased seven and a half pounds in weight.

New Uses of Beets.—A new species of manufacture has just been brought into existence in France viz., the fabrication of paste board or *papier mac'e*, from the pulp of beet root. This fabrication is already carried on to some extent in the commune of Tonlain, and can be employed, it is said, with advantage in ornaments, tea trays, and other such articles. A new alimentary production has, also just been invented, made from beet root. It very closely resembles coffee and has received the name of *betterave toriffe* (scorched beet.) When mixed in equal proportions with West India, coffee, the taste is by some persons thought more agreeable than that of the genuine article. It is thought to be less eating, and we would very confidently expect that it would be greatly less stimulating and injurious to the nervous system. Let coffee drinkers raise a few beets in their gardens and make trial of such a mixture. As a minor recommendation it is said that coffee made from the mixture of scorched beet and genuine coffee, does not require above half the usual quantity of sugar.

A Great Crop of Corn.—Premium crops of Indian Corn, in New York, the New England States, and the more northerly of the Western States, seldom exceed 100 bushels to an acre. The more frequently fall below than rise above this amount. In our volumes of the last years will be found the statement of Hon. J. W. Colburne, of Vermont, to the State Ag. Society's Committee on Farm crops, giving an account of the mode of management adopted in raising a crop of 113½ bushels per acre, to which the first premium of the society was awarded. But as we have said, in the states named there are

more premium crops under than over 100 bushels. In Ohio and Kentucky much larger crops have been reported. For example the premium crop of Indian Corn last year, (1855,) in Ohio, is reported to have amounted to one hundred and sixty-two bushels per acre.

A Cheap Ice House.—A person, in the country, where timber is cheap, can erect an ice house at but little expense. All that is required, is to put up a strong frame for the size of house required, and board it up close, inside and outside, with a space between, all around. This space is stuffed close with straw, or dry saw dust. The roof is made in the same manner, and the house is then complete. Straw and saw dust are cheap and good non-conductors. The house should be situated on a dry spot, and should have a drain under the floor. It should also be convenient, to be filled easily. The walls of stone and brick ice houses should be double, as well as those of wood. Great care should be exercised in packing ice; all the blocks should be clear and solid, and about the same thickness, so that they may be packed close together, and frozen into a solid mass. In favorable situations good ice houses may be excavated like caves, in the face of a hill.

Decrease in the Number of Horses in the West.

When Railroads were first instituted in this country, it was feared by many that the rearing of horses, at that time a great source of profit to the farmer, would be greatly injured by breaking up the market for stage horses. But while the demand for horses has fallen off in this respect, the Rail Roads have opened a new and important branch of trade to the farmer more profitable than that of rearing horses. We refer to beef-cattle. Before rail roads were established, cattle in the West brought but a small price to enable the drover to meet the expense of a long journey on foot to the eastern market and compete with eastern reared cattle. Now they can be carried so speedily and at so small a price that cattle are reared to a great extent, to the neglect of horses. The rearing of mules has also had much to do with the decrease in the number of horses in the country, until the price of good horses has advanced, within ten years one or two hundred per cent.

We have no data at hand to ascertain the comparative number of horses now in Kentucky or Missouri with any former period, but there is evidently a large falling off. But from the returns of the Assessors of Ohio to the State Auditor's office it is ascertained that within the last three years the falling off in the number of horses in that State is upwards of 11,000. In 1844, there were 632,598. In 1855, there were 624,796. In 1856 the number is reduced to 621,443. The number will still be diminished the present year not only by the regular trade, but the great demand and high price in the new West will draw off all that can be spared.—*Valley Farmer.*

Frosting for Cake.—Ten teaspoonfuls of powdered sugar to the white of one egg.

How Deep should Seeds be Planted?

In planting the various kinds of garden seeds, many persons manifest a great want of judgment in regard to the proper depth that seeds should be covered. The error is more frequently in planting them too deep than otherwise.—The depth that seeds should be planted varies with the kinds, and in some degree with circumstances. Large seeds of strong growing plants, such as peas, beans, corn, &c., should be planted deeper than the small seeds of delicate growing kinds, like carrot, lettuce, parsley, celery, &c.

To insure speedy vegetation, seeds require a due degree of moisture, heat and air. If the seeds are not covered sufficiently deep, particularly after the warm weather of spring sets in, they often lack moisture and fail to vegetate.—If planted too deep, they do not receive the requisite amount of heat and air, and they either rot, or the young plants exhaust their strength and vigor in forcing their way into the open air. Such plants as the radish, cabbage, turnip, and the like readily absorb moisture, and if the weather is warm, come up in a few days after planting. Such varieties as the parsnip, carrot, celery, parsley, &c., with the most favorable requisites of vegetation, are generally a long time in coming up, and must be planted early, before dry weather sets in, or they are liable to fail altogether.

As a general rule, the seeds of delicate plants should be covered about *half an inch* deep—more or less—according to the lightness of the soil and the season of planting, as it regards the prospect of moisture. The seeds of beets, several of which are inclosed in a single head, capsule or seed-vessel, require considerable moisture to cause them to burst forth, and if not planted early they should be soaked for thirty-six hours. The water should then be turned off and the seeds kept moist for several days before planting. Such varieties as peas, beans, okra and similar kinds, require a covering of earth from *one and a half to two and a half inches*.

We are lead to offer these remarks from the inquiry made of us by a friend—"How deep should peas be planted?"—stating that last season he planted them twelve inches deep, according to the instructions contained in the "Ohio Farmer," but the planting of seed was the last he ever saw of them—none ever saw the light of day afterwards. We should regard it a miracle if they had. This is an extreme repudiation of Prof. Comstock's theory of "Terra Culture."

We see an article going the rounds of the papers, sometimes credited to the "Horticulturist," and sometimes without credit that, "With regard to the depth that seeds should be covered, it is a safe rule to cover them with a depth of soil about *equal to their own thickness*. This cannot always strictly be done, but it should be aimed at as near as possible."

Here then, we have instructions from public teachers—the one recommending that peas be planted to the depth of *one quarter* of an inch: the other advising *forty-eight times* as deep.

Seeds cast by the hand of nature are usually very abundant. These generally drop in the fall, and by spring some of them may receive a covering "equal to their own thickness," and if they fall in favorable locations, *one in ten thousand* of them may vegetate and mature, answering all the ends that nature designed.—But man is endowed with reason, and is required to aid nature in the only avocation assigned him by his Creator, in tilling the ground.

It is not a matter of great surprise that so many agricultural papers fail to receive adequate support, or that "Book Farming" is not more highly esteemed by the mass of cultivators, when such instructions are promulgated, so much at variance with reason and the most common observation.—*Valley Farmer*.

From the Mississippi Planter and Mechanic. Agricultural Papers—Education.

MR. EDITOR:—No where more than in agriculture does *knowledge* constitute *power*, though probably, until recently, in no department of human labor has this fact been so little appreciated as in American agriculture. But the careful observer will see in the signs of the times evidences of a new era—the dawn of a brighter day so far as respects the diffusion of agricultural information among the masses. "Coming events cast their shadows before," and the various organizations in our midst in the shape of county, State and national agricultural societies, indicate a consciousness of a deficiency of agricultural knowledge, with the resolve to employ the means necessary to an improvement. But of all means employed there is probably none more efficient than the press. It is in the various agricultural journals of the day that are to be found the observation and experience of our oldest, most practical and most experienced farmers. The different articles of production—the soil best adapted to particular crops—the best modes of preparing and cultivating the soil, are some of the subjects herein discussed, and by this free and open interchange of views, all are mutually benefitted. Hence the importance of such journals to the agricultural interest will be readily conceded by every reflecting mind.

We hail with pleasure the establishment of an agricultural paper within the limits of our own State. It is surprising that in a land like ours—a land of producers—where, from the nature of things, the chief wealth of the nation must ever remain *agricultural*, so little attention should have been given to the dissemination of agricultural knowledge.

We have not a single institution at which a full, complete and thorough knowledge of the principles of agricultural science is taught.—We have our literary institutions, where all the other sciences are taught. We have our theological seminaries—our schools of law—and our medical universities; but no school to teach the principles of science as applied to agriculture. For agricultural information and instruction, we must look chiefly to the agricultural press. Hence we would naturally conclude that in a nation like ours, or a State like ours,

where the masses cultivate the soil, no class of journals would prove so popular and so extensively patronised. But such is not the case.—How rare a thing to meet with an agricultural paper. And yet where is the cabin that does not possess its political sheet? Examine the libraries of our farmers, and you will find fewer works treating of his own avocation than upon any other subject. And how is this fact to be explained? Is it because agriculture, whether viewed as an art or as a science is not progressive? Of all the varied employments of man, do those only engaged in agriculture possess

"Skills that can neither teach nor learn,"

Is our knowledge of agricultural science intrusive? In every other department of human labor, before acting, we endeavor to understand the principles involved, so that we may act intelligently. It is the remark of Lord Brougham, "that though man be neither mechanic nor peasant—but only one having a pot to boil, he is sure to learn from science, lessons which will enable him to cook his mutton better, save his fuel, and both vary his dish and improve it." What is true of everything else must also be true of agriculture; and I rejoice to see the indications in our midst, that this fact so important, and yet apparently so little regarded, is beginning to be appreciated. All
All success to the PLANTER AND MECHANIC.

AGRICOLA.

United States Agricultural Society.

Great National Trial of MACHINERY and IMPLEMENTS of every description pertaining to AGRICULTURE, and Household Manufactures, at the

FIFTH ANNUAL FAIR,

to be held in Louisville, Ky., during the Fall of 1857.

The undersigned, a Committee of the United States Agricultural Society, appointed at the Fifth Annual Meeting held at the Smithsonian Institute, in the city of Washington, on the 14th day of January, 1857, "to make all the necessary arrangements for a National Trial in the field of Agricultural Implements and Machinery," respectfully invite the Inventors and Manufacturers of all such articles, both in the United States and Foreign Countries, to participate in a public trial to be made at the Society's Annual Exhibition, to be held in Louisville, Kentucky, during the fall of 1857.

This new arrangement for the exhibition of Agricultural Implements and Machinery of all kinds in actual operation, results from a conviction on the part of the Society that no just awards can be made, except upon a practical working trial before competent judges; and the fullest opportunity will be afforded to test the comparative merits of the various machines that may be entered as competitors for the awards, both as regards land for field implements, and steam power for stationary machinery.

A SEPERATE TRIAL OF REAPERS AND MOWERS will be made at the appriate season, special ar-

rangements for which, as to time, place, &c., will be announced at an early date.

It is intended that these exhibitions shall be on the most extensive scale, for the purpose of testing the working qualities of these important implements more thoroughly than has yet been done on any previous occasion, either in the United States or in Europe.

All articles from foreign countries intended for exhibition may be consigned to the "Agent of U. S. Agricultural Society, Louisville, Ky.," by whom they will be received and stored free of charge.

This brief announcement of the proposed trial is made at this early date to afford the most ample time for the preparation and transmission of machinery. A circular containing full particulars as to regulations will be issued as soon as practicable, and, with the premium list, will be forwarded to persons who may apply to the Secretary of the Committee, Henry S. Olcott, *American Institute*, N. Y., where all business letters should be addressed.

To enable the Society to make arrangements on a sufficiently liberal scale, it is absolutely necessary that the Committee should know what articles will be afforded for competition; and they therefore request that all inventors or manufacturers who may be disposed to unite in the proposed trial, will communicate their intentions to the Secretary at their earliest convenience.

TENCH TILGHMAN, Chairman, Oxford, Md.

JNO. D. LANG, Vassalboro, Me.

J. THOMPSON WARDER, Springfield, O.

GEO. E. WARING, Junr., Am. Institute, N. Y.

HENRY S. OLCOTT, Sec., Westchester Farm School, N. Y.

Committee on Implements and Machinery of U. S. Agricultural Society.

Editors of Journals of every description, who are desirous to promote the interests of Agriculture and Mechanics, will confer a particular favor by an insertion of the above circular.

To sweeten Rancid Butter.—An agriculturist, near Brussels, in Europe, having succeeded in removing the bad smell and disagreeable taste of some butter by beating or mixing it with chloride of lime, he was encouraged by this happy result to continue his experiments by trying them upon butter so rancid as to be past use; and he has restored to butter, the odor and taste of which was insupportable to all, the sweetness of fresh butter. This operation is extremely simple and practicable for all. It consists in beating the butter in a sufficient quantity of water, into which had been mixed 25 or 30 drops of chloride of lime to two pounds of butter. After having brought all its parts in contact with the water, it may be left for an hour or two; afterwards withdrawn, and washed anew in fresh water. The chloride of lime used, having nothing injurious in it, can safely be increased; but after having verified the experiment, it was found that 25 or 30 drops to two and a half pounds of butter were sufficient.

From the Valley Farmer.
Indian Corn.

Indian corn has become the most important product of our country. Cotton, wheat, sugar, have fallen behind it. There are many reasons for believing that it will become the most important cereal the world over. Its adaptation to so many uses, for man and animals, its cheapness, the ease with which it is raised, its heavy yield, the extent of climate in which it can be grown, must make it a most important product of every agricultural country. The masses must rely upon it as one standard article of food.—An experience of many years in this country has proved its healthiness, and its adaptation to human wants as an article of food.

The culture of corn has increased very rapidly within the last few years. The opening of the Western prairies, and the settlement of the Mississippi Valley, has spread the corn fields of our country over a vast territory. If it was all in one field, it would be such an one as would make the world wonder.

From 1839 to 1849 the increase of the corn crop, as seen by the census returns, was fifty-eight per cent. The wool crop of the country, which was the next highest, increased fifty per cent; cotton twenty-four; wheat sixteen.—Since 1849 the increase of corn has probably been still more rapid.

It has generally been supposed that the cotton crop is the most important of any in our country, supporting as it does, the cotton mills of Old and New England. But facts have proved that corn now stands first in point of value. The cotton crop of 1851 was 927,000,000 lbs., valued at \$12,000,000. The corn crop of 1850, was 592,000,000 bushels, which at any reasonable price must give it a value considerably above the cotton crop. Considering that the corn crop is increasing more than twice as fast as the cotton crop, and has been since 1850, we can see that it must now be about double the value of the cotton crop.

A crop of such importance is worthy the best attention of the farmer. If attention to the best qualities and culture should increase the crop only one bushel to the acre, it would make an immense increase in the general crop. And yet, experience teaches that careful culture often increases the crop 20 and sometimes 40 bushels to the acre. The value of the corn crop is annually increasing by the improved methods of getting it to market. Railroads are opening whole States to the market. Let the farmer weigh well the importance of his corn.

An Interesting Fact.—The recent investigations of Prof. Wray, chemist to the Royal Agricultural Society of England, have brought out a curious fact, which may throw light upon the *rationale* of some important practices in agriculture. Rain water contains ammonia and nitric acid, and it is from these two substances that the nitrogen of plants is obtained. A series of examinations of the water discharged from underdrains, show that it contains less ammonia and more nitric acid than rain

water. Rain water filtering through the soil, then, parts with its ammonia, but dissolves out nitric acid from the soil or manures. How is nitric acid formed in the soil? Probably, says Professor Wray, from the oxydation of nitrogenous manures; and he recommends a more perfect admixture of manures with the soil as the most likely means to prevent the formation of nitric acid, and the loss of nitrogen from leaching. It appears to us, too, that if the manure was thoroughly decomposed before applying it to the land, it would not only be easier to mix it ultimately with the soil, but there would be less nitric acid formed, and consequently less loss.—*Georgian Farmer.*

Is the first Milk Poison?—A friend informs us that Mr. H. B. Wyman, of Sidney, lost a valuable sow not long ago, in consequence of giving her the first milk of a cow after calving, and asks if it invariably causes such trouble if hogs are fed on it? We believe that it does. We one year gave some such milk to a sow that was with pig. It made her sick and she cast her pigs before her time, all of which were dead. We were told that such would be the result if we fed her with it, but were faithless. The next year we fed it to another under the same circumstances, and the result was the same—all the pigs being dead. We found that rather costly experimenting, and have never tried it again. Last spring one of our neighbors who had a very fine sow, fed her with a pretty generous portion of such milk, she immediately became sick and came very near dying.

And now we have the above fact related of Mr. Wyman's sow as above.

We think those facts are sufficient to warrant the conclusion, that such milk is highly injurious to swine, or at least to sows. It would be rather expensive to go into a series of experiments, to swine, but when isolated and accidental cases are all followed by the same result, it is fair to consider it an established law of nature, and worthy to be put down among the scientific facts in animal physiology.

Transplanting Evergreens, Pear Stocks, &c.—What is the proper time for and manner of transplanting evergreen forest trees, Spruce, Balsam, Pine, &c., and what size trees would it be best to take, transplanting from swamps where they grow naturally, to open ground and an entirely different soil?

How does the common thorn apple answer as a stock on which to graft the pear, and how would the pear answer as a stock for apples?

W. B. Louisville, N. Y.

[Spring is the best time to set out evergreens—although success sometimes attend the operation if performed in summer, at a moist time, at a period of cessation in growth, and with plenty of earth on the roots. The great secret of success is to remove and carry with the roots a large portion of the earth in which they grew,—enough, as a general rule, to hold them against the wind without staking. Some evergreens, as the balsam, for example, will often live without this precaution, provided the

roots are not allowed to be exposed a moment to the dry air—plunging them immediately into wet moss or wet straw, till mudded and heeled-in, or planted. Others, as white pine, will never grow without a mass of earth taken with the roots; and with it, they will *always* succeed.—Five or six feet high is a good size; although with extra pains we have succeeded well with trees twelve feet high.

The thorn sometimes answers well for some sorts of pears, but we cannot recommend it.—The pear for apple, may prevent the attacks of borer, which does not often attack the pear.]

[*Country Gentleman.*]

What a Man wants his Wife to know.—There are certain things a man wants his wife to know, which are never learned at Ladies Seminaries, and too seldom, we fear, at home. One would like his wife to know how to make a shirt.—Ever so rich, it would be a comfortable sensation to think that she made it, yet there are some who cannot even sew on a button. To be able to cook a beefsteak properly, or roast a joint to a turn—to make a savory sauce, or dish a fricasee—to cook one's husband a good dinner, in short, if need be, is what every woman ought to know, and what very few do know, until obliged to learn it. It is a solemn fact, that not one marriageable girl in 20 can make a really good cup of coffee.

It is all very well to study French, without ever being able to read or speak it with any facility—to learn six or eight sciences up to confused smattering, unavailable from the fear of making blunders, to learn music and drawing for the parlor and drawing room; but a man wants more than this in a wife; and the sensible lover is often frightened away from an amicable girl by a display of accomplishments, which indicate the lack of more useful acquirements.—*Rural American.*

For House-Wives.—You who are in the habit of using Salutaris in bread, would, perhaps, by discontinuing its use immediately, save yourself the mortification of knowing when too late, that you have been administering poison in broken doses to your offspring and household, and thus ceased decrepitude if not premature death to mark them a victim. On this subject hear what a scientific gentleman says:

In a recent lecture Prof. George Sumner remarked—"The excessive use of salutaris is a cause of American ill-health. It is deadly poison, the use of which should be shunned as the slaughterer of the infant and the destroyer of the strong man."

A Domestic Improvement.—Putting down carpets with tacks has always been a trial and tribulation to housekeepers, which ought to have been obviated by some better invention before this. An improvement which will answer the purpose has been announced. It consists of a series of cast iron buttons, with the lower end formed in the shape of a cam. This is secured to the base board of the room, and when the carpet is properly stretched, the cams are turned down upon it and retain it firmly in

place. This saves the carpet from the tear and wear of tacks, and the floors from the injury of nails being driven into it, besides making the putting down and removing of carpets but a few minutes' work.—*Exchange.*

The Coffee Trade and Culture.

Like sugar, coffee was introduced as a luxury and finally became one of the established necessaries, or at least staple articles of consumption, throughout the civilized world. It has also followed, both in production and consumption, the same geographical lines, and appears to have been affected by the same industrial laws and political and social changes as sugar. As the demand for sugar has constantly increased and is still increasing, so has the use of coffee extended, and it is as likely that its progress will be *pari passu* with sugar, even if it does not exceed the latter, on account of the happy combination it affords as a stimulant, a sedative and a nutriment in the same beverage.

It is curious to trace the effects produced by the forcible abolition of slavery in St. Domingo in 1792, and the voluntary emancipation of the slaves of Jamaica in 1834, upon the geography of the coffee culture and upon the amount of the production in the islands mentioned.—For instance, before the breaking out of the revolution in 1792, the principal supply of coffee for Europe was derived from St. Domingo, that island having produced no less than 76,000,000 pounds in 1789; but after the servile insurrection and the liberation of the slaves, the supply was almost entirely interrupted, and, though the cultivation of coffee partially revived afterwards, in 1818, the exports were only 26,000,000 pounds, and at this time they do not exceed, it is supposed 30,000,000 pounds.—The sudden check given to the culture in St. Domingo largely stimulated it in Cuba, Jamaica, and some of the East India Islands. Finally Brazil, on account of its abundant and cheap slave labor, became a formidable competitor, and after the emancipation by the British Government of the slaves in Jamaica it began to supply not only the deficiency caused by that act, but to furnish an equivalent also for the growth of coffee in Cuba, which had been nearly altogether superseded by sugar.

As an evidence of the wonderful stimulation given to coffee culture in Brazil by the political causes we have alluded to, combined with the enormous price—nearly as high as 40 cts. per lb., at one time—reached by coffee, and the unrestricted introduction of slave labor, we find that, in 1808, in the infancy of the culture, the production did not exceed 8,000,000 pounds; in 1830, it increased to 64,000,000; in 1840 to 163,000,000; and in 1854 to 400,000,000, or two thirds of the entire production of the world.

The consumption of coffee has steadily kept pace with its production, if it has not taxed the productive resources of all the coffee-growing countries; but the greatest increase of consumption has been in the United States, where for twenty-five years it has averaged 7½ per cent

per annum, while for the world the average was 4 per cent. per annum. The following figures show the condition of the coffee trade between the United States and Brazil, as now ascertained:

For the fiscal year ending the 30th June, 1855, the United States imported from Brazil 135,369,333 lbs. of coffee, of the value of \$11,315,818; other Brazilian products, including some sugars, amounted to \$9,203,117.

Total imports.....\$15,218,835
Total exports for Brazil.....4,261,273

Balance of trade against the United States \$10,957,662

The imports of coffee alone from Brazil in 1854-55 exceeded the exports of the United States to that country by \$7,553,545.

The total importation of coffee into the United States for the year ending June 30th, 1855, amounted to 190,764,259 lbs., valued at \$16,764,259. For the year ending June, 1856, the quantity has been much larger, and as prices have ruled high, the value has been much greater.

We also subjoin the following table, showing the relation in which Brazil stands to other coffee-growing countries.

Comparative Statement of the production of Coffee in the world at different periods—(the production of one year enters into the consumption of the succeeding year.)

	1848.	1850.
Brazil, lbs.	270,000,000	280,000,000
Java.....	110,000,000	115,000,000
St. Dom'o.	40,000,000	45,000,000
Cuba & P.R.	40,000,000	3,000,000
Br. W. I....	10,000,000	5,000,000
Sumatra....	10,000,000	15,000,000
Mocha, etc...	5,000,000	5,000,000
Ceylon, In..	25,000,000	35,000,000
Venezuela..	20,000,000	25,000,000
Costa Rica..	5,000,000	7,000,000

Total...540,000,000 565,000,000

	1854.	1855.
Brazil, lbs.	400,000,000	320,000,000
Java.....	140,000,000	128,000,000
St. Domin'o.	40,000,000	35,000,000
Cuba & P.R.	25,000,000	25,000,000
Br. W. I....	5,000,000	5,000,000
Sumatra....	15,000,000	15,000,000
Mocha, etc...	5,000,000	5,000,000
Ceylon, In..	40,000,000	50,000,000
Venezuela..	25,000,000	25,000,000
Costa Rica..	8,000,000	9,000,000

Total...703,000,000 667,000,000

Now it is evident from all the foregoing, that the position of Brazil in regard to coffee is very analogous to that of the United States in regard to cotton. It is also seen in the above table that the island of Ceylon, one of the British East India possessions, alone approaches Brazil in the increase of its coffee production, and thereby hangs the solution of much that has hitherto appeared inexplicable in British policy relative to slavery and the slave trade in Brazil as well as Central America. Wishing to secure the monopoly of the production as well as manufacture of cotton for the world,

and believing that her East Indian possessions could produce the necessary supply, Great Britain sought, during the half of the present century, to procure the abolition in the United States, and thereby destroy the cotton culture of the South; and willing to supplant Brazil in the growth of coffee, as she has already supplanted her in the production and supply of indigo, she has succeeded in finally suppressing the slave trade of Brazil, and hopes to effect its ultimate abolition and reduce that most prosperous of all the South American countries to the same social and industrial condition as St. Domingo and Jamaica—desolated, paralyzed, powerless for competition, and useful as an obedient ally.

But if Great Britain looks at Brazil with envy, there are other countries which she contemplates not without jealousy and apprehension of future competition, and the possibility of coffee being cultivated with slave labor in Central America suggested, doubtless, the clause in the late treaty with Honduras, binding the latter to prohibit slavery. It is this feature of British policy, too, that has caused her diplomatists to be so strenuous in their efforts to counteract American colonization in Central America. To give us a foothold there, argue the British statesmen, is to give us, in addition, to our present control of the growth and supply of cotton, a *pionte d'appui* from which we may with the assistance of slave labor and the management peculiar to our planters, gradually get into our hands the largest production of coffee as well as sugar, in the world. They are not ignorant also, it is probable, that contiguous to Central America are the Mexican provinces bordering on the Tehuantepec transit, which are better adapted to coffee than any portion of British East India, and which in American hands, would wrest from Great Britain the anticipated monopoly, even if she should succeed in breaking down the Brazilian coffee culture. Is such a result impossible? He who looks keenly into the possibilities—nay, probabilities of our future relations with Mexico, will not hastily express a doubt of such a consummation; and if our statesmen and diplomatists would favor us as much as geographical facts, political tendencies and ethnological principles, we believe we should hold in our hands, at no distant day, the triple key of commercial empire—to wit: cotton; coffee and sugar.

Effect of Railroads.—It is mentioned as a noteworthy fact, in illustrating the influence of railroads on real estate, that the eight counties in Virginia immediately penetrated and influenced by the Virginia and Tennessee Railroad, viz: Bedford, Roanoke, Montgomery, Pulaski, Wythe, Smythe, Washington and Scott, show an increase of \$9,376,639, their aggregate land value in 1850 having been \$14,446,059, and now being \$23,822,728. The adjoining counties, which have been more remotely influenced by the road, show a like increase, and give with those named, a total increase of \$20,000,000. The same also is true with almost every other prominent line of railroad in the country.



The Farmer and Planter.

PENDLETON, S. C.

Vol. VIII, No. 7, : : : : July, 1857.

The Law of Newspapers.

We would call the especial attention of subscribers who intend discontinuing their paper without paying up all arrearages, to the following:

1. Subscribers who do not give express notice to the contrary, are considered as wishing to continue their subscriptions.
2. If subscribers order the discontinuance of their papers, the publisher can continue to send them until all arrearages are paid.
3. If subscribers neglect or refuse to take their papers from the office to which they are directed, they are held responsible till they settle their bill, and order the papers discontinued.
4. If any subscriber removes to another place without informing the publisher, and their paper is sent to the former direction, they are held responsible.
5. The court has decided that refusing to take a newspaper from the office, or removing and leaving it uncalled for, is *prima facie* evidence of an intentional fraud.

A Correction.

Our subscribers, such as have not received corrected numbers, will please turn to page 149, June No., under the head, "Broomisedge's Proposition," &c., and on 4th line from bottom, correct "the highest occupant of our columns," &c., so as to read, "the first occupant for the restoration of exhausted soils, &c. This error is doubtless the work of the Devil in our absence, whose devotion to friend B., causes him on all occasions to lavish his praises as did the lady in helping the Frenchman's plate to the good things set before him—"Plenty, madame, *too much* plenty."

Again, on page 150, under the head, "E. another esteemed friend," &c., line 4th, for "correspondent or subscriber," read correspondents or subscribers. In our request we were not disposed to be so *singular*.

Deferred Articles.

Several communications have been received, and although they came to hand before the middle of the month, are crowded out—shall appear in our next. Hereafter our friends will please send in early in the preceeding month, all articles they may desire to appear in our next month's number. We are becoming more industrious than heretofore, and besides, friend McBLEE keeps us regularly supplied with printing pa-

per. We can't get suitable colored paper for our covers, and consequently must use the white.

Corn and Pea Planter.

We have received from the Rev. J. M. CARLISLE, of Williamston, a very convenient, and with a little improvement which we could point out, a very efficient implement for planting corn, peas, &c. It is carried in the hand as a walking stick, and does its work correctly and as rapidly as it can be lifted up and set down in a brisk walk. The machine without the seed, which is placed in a long hopper or tube running down the side, will not weigh exceeding two pounds. Mr. C. has applied for a patent.

Answers to Subscribers.

Our subscribers who make enquiries about their accounts, &c., without enclosing a stamp to pay postage on answers, will in future be answered through the Farmer and Planter—initials only given.

L. J. W., Sterling Grove, S. C.—Your account is for three volumes, including vol. 8, \$3 00.

Maj. A. J., Leesville, S. C.—The Farmer & Planter has been started on a "trot" to your address, friend J., monthly since the commencement of the volume, but as it seems from your letter just received, it has not arrived, we fear it has been taken up somewhere on the way. Yet it seems strange that the papers of several other subscribers should have gone through, whilst yours have lagged behind. Perhaps, as is often the case, you send by some neighbor to the office for your paper, and if so, we are not surprised at your not receiving them. People who will not subscribe for a paper, but depend on borrowing of their more generous neighbors, are very apt to *recollect* to forget to return one when borrowed. or to take it home when it happens to fall in their hands at the office. We have started all the numbers again, and in a *gallop*, hoping they may brush through and reach you in due time.

C. W. P., Richardsonville, S. C.—Your subscription due \$3, was received and placed to your credit as will appear probably in our present number.

Capt. J. E. S., Kingstree, S. C.—You have overpaid \$2, please send us the names of two new subscribers, otherwise we are in your debt.

Cokesbury, S. C.—A new subscriber writes us: "Enclosed please find \$1, for a years subscription to the Farmer and Planter. I want an agricultural paper, and yours is one of our own soil. The State Agricultural Society is indebted to me for one by terms, and I reckon I might order one and have it charged to the Society. However, as it is questionable whether *that* claim is as good as *this* on the State, I want to make sure of the paper, and send the enclosed demand."

You have done just right, friend C., your S. C. bill enclosed has a much stronger claim on the State than has the Society on us to furnish the Farmer and Planter to subscribers for nothing. We have published in the current volume, more than one article touching the culture, &c., of the Chinese Sugar Cane, and therefore, send you all the back numbers.

Soap.

Knowing how much soap makers, having no knowledge of chemistry with a full share of superstition and fear of the moon, are at times annoyed in their operations. We have from time to time published recipes for soap making in the Farmer and Planter. We are not going to publish one now, however, but to do a better service to our readers, in recommending them where to get one which we with sundry others, ladies and gentlemen, our neighbors, have worked ourselves into the secret of recently, to the great delight of our better halves especially, who have resolved, if they do not keep things cleaner henceforth and forever, it shall not be for want of soap. We allude to the recipe for making "Roraback's Compound Chemical Toilet and Washing Soap." Another humbug, some readers will say; so it may be, but if so, we are one among the humbugged, and so far, are well satisfied with the infliction. We witnessed recently, the process of making both the Toilet and Washing Soap, which was simple, expeditious and comparatively inexpensive.—The gentleman, Dr. Westmorland, who with a Mr. Sharpe, has the right for our State, and we believe of some others, exhibited to those who purchased a family right, the *modus operandi*, informed us that the toilet soap as good as our merchants are selling at ten cts. per cake, not weighing more than one ounce—would cost not exceeding 3 cents per pound, and the washing soap $\frac{3}{4}$ of a cent per pound. Now if this be true, and we can't doubt it from the character of the gentleman, who is a native of Greenville District, and of a highly respectable family. Who can doubt the economy of the Roraback Soap, when compared with the old lye and grease article? In the manufacture of this patent soap neither of the last mentioned ingredients are used directly or so far as we are informed indirectly. And here again is a saving in every family that is in the habit of making its own soap; for the soap fat may be converted into candles by a recently discovered process or may be used on machinery, &c., and the *unleached* ashes, every farmer and planter is aware, are much more valuable as a manure than the leached. In addition to making the above named soaps, the process of "changing our barrel of lye soap into two" is given. This involves a cost of less than one dollar, probably not exceeding 50 cents. This article is said to be equal pound for pound with the soap in its original state for washing clothes, &c. So ladies, look out—send your husbands in haste to hunt up Messrs. Sharpe & Westmorland, and give them no more peace nor clean clothes, till they have secured a right. Individual rights are sold at \$16; to clubs of ten persons, at \$8 each.

Extracts from Letters Received.

CROPS.—*Glens Springs*.—R. A. C. "Prospects for crops not good in this neighborhood. Very many cotton fields planted in corn, and those not plowed up, have very poor stands, not more than half."

Robertsville, S. C., B. F. B.—Our prospects in this region are very poor, corn backward, cotton

small and the stand very broken—the seasons wet and cold.

Maybinton, S. C., G. D.—"My stand of cotton is any thing but satisfactory. The spring has been too cool, and I planted deeper than usual. Our wheat crops are better than I thought three weeks ago, they would be. The oat crop is looking well."

Trafficking with Slaves again.

Our friends STOKES & HUGGINS, of the *Laurensville Herald*, in copying an article from our June No., under the above head, make the following pertinent remarks, which we with pleasure transfer to our columns, desiring, as we do, to keep the ball in motion until a *practice*, the impropriety (to say the least of it) of which every honest man will admit, is put down.

"On our first page will be found an excellent article on this subject, which we hope will be read by all our citizens—particularly of this village. We honestly believe more injury is done to the slaves, by trafficking with them than in any other way. But the negro is not the only sufferer. The owners and all house-keepers suffer from it. We know an instance where a lady had thirty of the very finest chickens stole in one night. Now, where did they go to? The negroes,—it was very evident negroes were the thieves—did not keep them, for they were of such peculiar breed and large size, that their owners would have suspected they were stolen, consequently they had to sell them. Now, who, by purchasing those chickens, induced the weak minded negro to steal? If no one would purchase such things from negroes, there would be no encouragement to steal them; and this brings out the fact that the buyer is as much the thief as the one who steals.

We earnestly call upon our house-keepers to set their faces against trafficking with negroes without written permission from their owners. One of the greatest complaints made by our friends in the country against the village is, that they will traffick with their negroes, thereby encouraging them to steal and giving them the means of buying liquor and to engage in gambling. The fact is, we look upon it as a very dishonest transaction."

For the Farmer and Planter.

South Carolina vs. Mississippi Swamp.

MR. EDITOR:—Our old friend and cotemporary, Dr. Philips, makes very large calculations for so small a man. Both of Dr. P's articles in the June No. of the Farmer and Planter, are well calculated to induce many of our people to leave their good old S. C. for a *sickly* residence in the Mississippi swamp; and for what? to get *rich and extravagant*, for from the amount paid for dry goods alone, we would suppose there would not be much left of the ten bales per hand, after paying Doctor's bills, &c., &c., &c. It is true the system of agriculture pur-

sued in S. C., has been a scourging one, and much of our best rolling lands have been impoverished and washed into gullies. But we venture the assertion that the earlier settled portions of Mississippi are more badly worn (exclusive of the bottoms), than any portion of S. C. Compare that portion known as the Walnut Hills, in the vicinity of Vicksburg, with that portion of Fairfield Dist. around Winsboro'; the latter was settled and cultivated at least half a century before the former, and will compare favorably with it to-day. Dr P.'s cotemporary that moved with his three negro women, and made a princely fortune, is no criterion—he was the exception and not the rule. We recollect many acquaintances who left South Carolina for a more tolerable abode in the fertile west, who carried with them a handsome property in slaves, &c., who never “sold their 7 to 10 hundred bales,” but spent all they had, and became poor. If we mistake not, our friend Dr. P. was in this category. We are decidedly of the opinion that any man who is well settled in South Carolina, had better remain here. We think it cowardly in any man to impoverish his farm, his mother earth, and then run away and leave her in this sad condition, to be still further scourged, or may be fed up and fattened by a stranger. We differ *intoto* with Dr. P., we have no fears of foreign competition in the growth of cotton, we do not believe that the culture will outstrip the consumption, nor have we any fears of seeing the price of cotton settle below 8 cts. The day has been when cotton regulated the price of every thing, and it made no difference to the planter out of debt, whether the price was five or ten cents, but now the precious metals regulate prices, and as long as gold is found plenty in California and Australia, every thing will sell high for the simple reason that money is plenty and cheap.

We are aware that Dr. P. has written much for the cause of agriculture, and is one of the few who has labored earnestly for its improvement, but we hope he will be disappointed in seeing many of the sons of his “old school fellows” settled in the Mississippi swamp; we want them here to settle the old homestead around which is clustered all the pleasant associations of their lives; we intend to teach them the fact, that from the old farm, they have derived all the means by which they have been fed, clothed and educated, and that they owe her a debt of gratitude which they must pay, they must never forsake her, nor scourge her as their fathers have done, but learn wisdom from their fol-

ly, and pursue an entirely different system; they must avail themselves of the knowledge she has procured for them, and through the power of science rejuvenate the old farm, and leave it a rich inheritance to their posterity. We are not of those who desire a large fortune for our children, money as a means to procure the necessary comforts of life, and an education is desirable, and all honorable men will strive for that much, but money as an end to be hoarded up for our children to make them independent of the exertions necessary to procure a competency, is in my judgment more baneful than beneficial. Contentment is the word, say what we may or will, all our boasted riches are summed up in that one little word, *contentment*; but who can be contented without health, and to expect health in a residence on the rich alluvial soil of the Mississippi River, is something we cannot comprehend.

SPARROWGRASS.

Little Branch, June, 8th, 1857.

For the Farmer and Planter.

Osage Orange vs. Hedge Plants in general.

MR. EDITOR: On the 115th page of the Farmer and Planter, you allude to the Osage Orange as a hedge plant, with the remarks—“From all we have seen, we should prefer either the Cherokee, Microphylla, or the McCartney Rose as a hedge plant.” I have all reason to believe you will receive kindly an opinion from me, entirely opposite to yours, therefore, I give it. Some Editors would be as cool as a cucumber, if a small man from the backwoods would presume to differ from them even, but would get as hot as Cayenne, if he would dare to say “all wrong, and I know it.” You have extended to me such a marked courtesey, that I know even if I am wrong, you, like the true French gentleman, will not laugh at my error. (True, friend P.—Ed.)

I have known the Cherokee from my childhood, have now some two miles or so of it, I have somewhere near $\frac{1}{2}$ of a mile of the Microphylla, and about three miles of the Osage Orange.—The McCartney, I never saw.

The Cherokee will no doubt make a good hedge, but at great cost of labor and land, it is a gross feeder and a rampant grower on good land, it is very liable to being burned out, the shedding of the leaf will in a few years, give such a deposit of leaf which when dry, in our falls and winters, if fire be accidentally in the crop grass of our fields and catch to hedge row, it burns as rapidly as a “Prairie on fire.” I have had some 200 yards thus burned quicker than 50 hands could cut down with any sort of

tools; besides as the branches acquire age, the thorn either sheds off or is readily broken off, and the hedge is apt to grow on top and die out underneath. Hogs can find in any quarter of a mile a *soft place* to work through.

The Osage is a tree, one of slow growth after it is some ten years of age at least, yet it can be kept in bounds at half the cost of the Cherokee. I have but one objection to the Osage, and was it an evergreen to add beauty to utility, I would regard it as a perfect plant for hedges. I have grown it in a small way from seed, cuttings of limbs and roots, have pruned it, and cut off at and in the ground and with a proper care in giving a base and any ordinary attention. I pronounce it as far superior to the Cherokee, as it is to the red Microphylla, for I have the red Arbura, and the white Microphylla, and Maria Leonida, a running rose in a hedge. I should have said, as to the Cherokee, that corn, cotton and oats, will not pay for culture within 10 feet of the centre of the hedge, and in places over 20 and 30 feet, there is a visible effect on the crop, the roots run far and wide.

I sow Osage in drills one inch deep, with earth drawn in a ridge over them. I prefer sowing, when earth becomes warm enough to grow cotton, when seed have sprouts $\frac{1}{2}$ to 1 inch, knock off the ridge with a rake, and thus save a hoeing and much labor in hand picking out grass and weeds, and best to plant in fresh (new) land when no grass.

Seed should be soaked in water, warm water best, 5 to 10 days before planting, until the root shows in end of seed, water should be changed 3 or 4 times a day, and if oftener, the better, they ferment rapidly, and spoil of course. I have now about one acre planted, and hope to grow enough for all the hedging I can do, and to sell enough to pay for seed and labor.

If wrong, I will loose as much as any one, for I shall cut up all other hedges, and strive to hedge my entire plantation.

Mr. Logan Sleeper, at St. Louis, a grower of the plant, sent me 60,000 to sell for him; I sold them readily at \$4 per thousand, and could have sold 100,000 more. Two gentlemen took 20,000 each, and another wrote me for the whole lot. I know of planters of a large experience, say 20 years, with the Cherokee, who have cut down, and now are growing Osage.

I hope these remarks written off at noon-ing, hastily and when much fatigued, may serve to draw attention to the Osage, and that truth may be elicited and good done.

Yours, truly, M. W. PHILLIPS.

Edwards, May, 28th, 1857.

Milk sick.

If the writer of the following article on the cause of this dreadful disease is correct, he is entitled to a large reward, which we have understood has been offered for the discovery. We have always suspected it to be something of a very volatile nature, having a strong affinity for water from its being deposited with the dew on grass, &c., and from its absence where no dew is to be found.—ED. F. & P.

From the Country Gentleman.

The Trembles.

ENS. CO. GENT.—Several weeks back in a number of your invaluable journal, a correspondent from N. C., if I remember aright, made some inquiries of you or any one, regarding a form of disease by common consent termed "Milk Sickness." He asked for some information as to the cause of this distressing malady which has so far proven itself one of the opprobria of profession. It is my fortune to be able to state without hazard, to a certainty, the cause or causes of this disease. I have waited thus long, hoping some one would take the trouble and offer some information, but I have seen none. The number which contained the request has been misplaced by me somehow; I am, therefore, not quite certain as to the locality of the writer.

The agents that cause this disease are Copper and Arsenic. The former found in a state of nature as an oxide or sulphuret, or in the form of its native salts, the carbonate, sulphate, or arseniate. The latter, too, as found in mineral regions, usually associated with other metals, and its salts impregnating the earth to a greater or less extent.

The following circumstances gave origin to the discovery. Some parts of the fertile State of Illinois, afford often in summer no stock water. The suffering stock will greedily suck empty every little puddle or track, or any place wherein water may be gathered. It so chanced at this season of the year, that in the little excavations left by some quarrymen who were getting out rock, small quantities of water would "seep," and the cattle on their way home from the rich but dry prairies, sought out and eagerly drank the water. The leading one of the herd and her yearling arrived first at the place, consumed pretty much all by the time the others got up. As the cow was owned by one of the workmen, she was noticed by him with some satisfaction at her drink. But by the following morning the cow and yearling were seized already with the "trembles," and in a few days expired, whereas none of balance of the herd suffered. The rich milk obtained from her ample bag was given to the children, and all of them had attacks of the "Milk-Sick." The observation of the owner of the cow at the quarry, led to a further investigation.—These over sanguine for their own interest in their non-belief, furnished sheep, calves and colts to test the water, and every one perished. Again and again was this repeated, and each time the animal would be seized with the peculiarly characteristic symptoms of that disease.

and die with the trembles. Some of the water was then obtained and sent to a thorough chemist for analysis, who pronounced it to contain Copper and Arsenic mainly.

Every symptom which marks this disease will bear out the truth of this discovery, more particularly in the human subject. The poisonous effects of copper and arsenic correspond entirely to the symptoms of that disease. The effects of arsenic, it is too well known, are an interminable retching with a distressed, anxious expression of the countenance, indicative of almost complete collapse. Those of copper are not unlike in their action upon the gastro-intestinal mucous membrane, besides a muscular weakness amounting to a paralytic condition of the entire muscular system, as if all nervous influence was cut off, with excessive prostration and great tremor. The symptoms of the milk-sickness correspond exactly with the effects of these agents upon the human system.

If I recollect rightly, the writer from N. C. said that in his section the poisonous spots were known with that degree of certainty, that in many places, to prevent cattle from feeding on them, they had been fenced in. I will venture to assure him that if he will take the trouble to excavate a shallow pit in which during the night some water may collect, and have it subjected to chemical tests or analysis, some form of the salts of copper, and perhaps arsenic will be found. In travelling through a section of Illinois, sometime since, and while stopping for dinner, a district was pointed out to me as being much afflicted with the "milk sick." On resuming my journey, I shortly after rode into a creek and happened to notice some coal jutting out from the bank. I at once procured a piece, and on breaking it apart, found traces of copper all through it.

I give you these facts, Messrs. Editors, so that they may receive wider circulation, and also that observations at large may be made to either corroborate or refute them. I trust that every man so situated as to test these revelations, will do so and publish the results, and thereby contribute not only to the stores of science, but be instrumental in alleviating the miseries and diseases of his fellow mortals.—Because when the cause of a disease can be come at with certainty, a course of treatment can be devised that must prove curative.

ISAAC HUTCHINSON, M. D.

Evansville, Ia.

Eradication of Weeds by Law.

Mr. Donnelly the chief of the Irish Bureau of Agricultural statistics, in a recent report suggests the propriety of a law, which would render the extermination of weeds binding, under certain penalties, upon the farmers, and further says:

The presence of weeds act hurtfully in a greater variety of ways than many people imagine. Growing in the same soil with the cultivated seed, there springs up a rivalry between the two crops. The weeds not only take up room but they interfere with the action of the atmosphere, and absorb the moisture which feeds the

corn. When wind or rain comes, the weeds, being heavier than the corn crop, fall sooner, and in their fall injure the whole field. When the field is cut the weeds take a much longer time to dry than the crop in which they are found, and there follows a delay in the gathering of the harvest. Lastly, when the grain comes to be thrashed out, it is mixed with such a quantity of dross that endless labor has to be spent in separating what is good from what is bad, while a great deal of the seeds which are thus winnowed away, flies through the air, to interfere as injuriously as ever with the succeeding harvest. The seeds of these intrusive plants are, unfortunately, more prolific than those of the cultivated crop. A poppy, it has been calculated, bears some 50,000 seed; a thistle 25,000; the common dock, 13,000. Corn evidently has no chance against plants that are so fertile unless it be very carefully tended; and from the observations of Sir John Sinclair one can form a pretty good idea of the extent to which these noxious growths injure the crop.

Various experiments were made in order to ascertain the precise advantage gained by careful weeding. Fields were selected, one allotted to wheat, another to barley, and a third to oats. Part of these fields were carefully weeded, and the remaining portions were prepared in the ordinary manner, without any attempt to exterminate the weeds. It was then found that the former, or thoroughly cleaned division, in field of wheat produced 22½ bushels per acre, while the other division produced only 18 bushels, the yield in the one case being 25 per cent. better in the other. So of the barley; the produce of the weeded portion was more than double that of the unweeded, and the result with regard to oats was even still more decisive. When it is known that the weeding cost not more than 12s. an acre it will be seen that a very small outlay there is a very large return. It is not simply that the weeds are got rid of, but the plants rooted up and left to rot on the soil fertilize it, and so the bane becomes its own antidote. The land, it is true, will never be perfectly free from these intruders, but the evil may be reduced to a *minimum*, and the reward of vigorous weeding is, that, once successfully accomplished, the labor required in this direction will afterwards be trifling. Both the quantity, and the quality of the crops are improved; and not only is there this great gain at a very small cost, but there is also a saving in the process of winnowing the corn, and there is not so much risk run in the harvest from a lengthened exposure to the changes of the weather.

It is certainly annoying for a farmer who keeps his land in perfect order, to have for a neighbor a slovenly husbandman, who seems to rear cockle and thistle with the same assiduity that others bestow upon wheat and barley, and from whose badly kept fields the light seeds are blown with every breath of wind, to give endless trouble to the most careful agriculturist.

Mr. Donnelly talks of fines and justices of the peace; refers to a French regulation, that a

farmer may sue his neighbor, who neglects to destroy the thistles upon his land at the proper seasons; to a Danish law, by which farmers are obliged to root up the corn marigold; to an old Scottish statute which denounces that man as a traitor "who poisons the King's lands with weeds and introduces into them a host of enemies;" and to a recent act passed in the colony of Victoria, which requires the eradication of thistles, under certain penalties in the event of neglecting to do so. There can be no manner of doubt that such measures, if rigidly enforced, would have considerable effect, and that the result would be more beneficial on the character of the crops produced. We may well ask, however, whether this is the proper way to deal with nuisance. As a mere matter of theory, Mr. Donnelly's proposal is quite legitimate. As a matter of practice, it seems preposterous. It is the confessed duty of every Government to protect the property of its subjects, and in the last resort, if every other means fail, no good Government will refuse to put down a nuisance with its strong arm. With a nuisance of the kind in question, however, it cannot be necessary for a Government to interfere. If self-interest is not enough we fear that legislative enactments, of whatever kind, would only give excessive annoyance, without leading to any good results.

[*London News,*

From the Newberry Mirror.

The Newberry Agricultural Society

Will hold its annual Fair on Wednesday and Thursday, the 8th and 9th of July next, at 10 A. M. of each day. The meetings will be held as usual, in the grove below the academy. It is necessary to remark, that on Tuesday, the 9th at 12 M., will be held the Air-Line Railroad Meeting, at which will be present the President of the road, from Georgia, the President of the Charlotte and North Carolina Railroad, from Charlotte, North Carolina, the President of the Union and Spartanburg Railroad, the President of the Greenville and Columbia Railroad, and the President of the Laurens Railroad, together with directors from each and all of these roads, and delegations from Atlanta, Ga., Anderson and Chester. Come up, therefore, people of Newberry, one and all, to this great gathering for Internal Improvement.

The Stock, and other articles for which prizes are offered, will be shown on the first day at 10 A. M. The Committee of Arrangements will provide pens for stock; a stand for the exhibition of articles of taste, and Domestic Manufactures, and fruits, and for the officers of the Society, and seats for the spectators. The same Committee, to wit: Joseph S. Reid, Daniel Goggans, L. P. Kinard, Richard C. Chapman, and D. W. Reid, are charged with getting up just as good and as well ordered a barbecue, as they did last year, and have it on the table at precisely 2 P. M., of Thursday.

The following premiums will be awarded, viz: a cup of \$5 for each of the following descriptions of stock, viz: The best Stallion, the best Mare, the best Mare and Colt, the best 3 year old Colt, the best 2 year old Colt, the best

yearling Colt, the best pair of Carriage Horses, raised and broken by the owner, the best Saddle Horse, also raised and broken by the owner, the best Jack, the best 3 year old Mule, the best 2 year old Mule, the best yearling Mule, the best Bull, the best Cow, the best Heifer, the best Calf a year old and under, the best pair Oxen, the best Boar, the best Sow, the best and largest Hog, of 2 years or over 1 year old, the best pair of Pigs, the best Ram, the best Ewe, the largest and best Wether, the best pair of Lambs.

A cup of \$5 will also be awarded for the best barrel of Flour, for the best article of Domestic Manufacture, of Cotton, Wool, Flax or combinations of the same, the best domestic Cheese, for the best 5 pounds of Butter, the best bushel of Irish Potatoes, the best side of Leather, the best Fan, the best Fly-brush, the best Axe, the best Plow, the best Wagon, the best Carriage, the best Buggy, the best Wheel-barrow, the best pair of Shoes, the best pair of Boots, the best Coat.

A premium cup of \$10 will be awarded for the best crop of Wheat, the largest product of Corn by the acre, the largest yield and finest specimens of Cotton. The wheat to be decided at the meeting in July. The Corn and Cotton by a committee to meet at Newberry, 1st Monday in November.

The cups for the last year will be delivered on Thursday, immediately after dinner, say at 3 P. M. The Anniversary Oration, by James Baxter, Esq., will be delivered on Thursday, at 10 A. M.

Committees on the following subjects, and consisting of the following gentlemen, are raised, and will meet at Newberry, 1st Monday in July, consult together and report at the meeting. If the members cannot be got together, the chairman, the first named gentleman on each committee, will report. The reports, it is hoped, can be made on Monday: brevity and clear information are recommended.

1st. Banks, their value and their abuses—their effect upon our agricultural community, for good or evil.—Robert Stewart, Dr. John K. Garey, James Fair, J. J. Kibler, W. W. Boozer, Gen. C. B. Griffin.

2d. Law and Lawyers, considered in an agricultural point of view.—Gen. James Rogers, W. W. Renwick, Major John Sims, George S. Cannon, R. B. Holman.

3d. Physic, Physicians and Medical practice considered also in an agricultural point of view.—Dr. Douglas, Dr. Rush Garey, Dr. T. W. Thompson, Dr. R. P. Clark.

4th. Fish, fish ponds, and the mode and manner of raising fish.—Col. Wm. C. Lyles, James Gantt, J. A. Eichelberger, B. F. Paysinger, D. L. Wicker.

5th. Commerce, its true use, as the road to intelligence, virtue and wealth, and not as a means of speculation.—Col. Whit. Walker, Gen. W. H. Hunt, R. S. Phinney, Gen. H. H. Kinard, A. J. Longshore.

6th. The Seasons. Have they undergone material changes within the memory of man? What is the cause of the backward spring of this year? Do the seasons run in cycles of

wet, dry, cold and hot? What are the best agricultural recommendations in this behalf?—The Rev. John J. Brantly, Dr. George W. Glenn, Simeon Fair, Esq., Col. John Glenn, B. F. Higgins, Esq.

7th. History. Its value to agriculturists.—Dr. Wm. H. Harrington, Silas Johnston, Esq., B. J. Ramage, Esq., P. G. Herbert, J. E. Guy.

8th. Health and Length of Days.—Dr. J. Renwick, Dr. A. Wicker, Dr. J. W. Simpson, Dr. H. W. Pasley, Dr. T. B. Rutherford.

9th. The climate, soil, productions, and Agricultural condition of Newberry District; is it favorable or unfavorable to health?—Dr. O. B. Mayor, Dr. W. W. McMorries, P. W. Chick, W. D. Cannon, Jacob Kibler.

10th. Newberry District, its resources, its prospects.—Col. Robt. Mootman, James H. Williams, William E. Harily, Dr. W. B. McKellar, J. M. Young, Col. George H. Chapman.

11th. Education considered as a means of advancing Agriculture, and conferring the blessings of literary information on farmers.—Dr. Peter Moon, Thos. W. Holloway, Paul Johnston, D. B. Piester, Major S. L. Rook.

12th. Orchards, including trees and vines.—Col. James M. Crosson, Capt. Henry Lyons, of Columbia, John Satterwhite, Jacob S. Lohg, N. F. Johnson.

13th. Farming, practically considered, results shown where a farmer manages his own plantation.—Geo. Brown, Sam'l. Chapman, Esq., Bennet Wallace, Col. Jno. D. Williams, P. H. Dennis, C. F. Sligh.

14th. The restoration and preservation of land.—Dr. John N. Herndon, W. R. Hentz, Samuel Spearman, A. K. Tribble, Simpson Bobo.

15th. Cultivation of wheat, time of sowing, how it should be put in, harvest, preservation of it for seed or flour.—J. R. Spearman, Capt. J. H. Counts, Col. W. S. Chalmers, Madison Brooks, E. Williams, J. W. Folk.

16th. Corn, varieties, uses, culture, means of producing largest crops.—Isaac Herber, Esq., Jacob H. Hunt, James Spearman, F. Spearman, Mark Glen.

17th. Cotton, seed, best, kind, time of planting, mode of culture, manures, best kind, how applied, gathering, quantity made to the hand, best manner of preparing it for market.—Daniel Goggans, Esq., B. Mangum, Capt. James Maffett, David Vance, John Wallace.

18th. Oats, Rye, Barley, cultivation and value.—Maj. Peter Hair, H. W. Garey, Thos. E. Chapman, John Galloway, C. P. Howard.

19th. Hay.—William Philson, W. C. Johnston, John Williams, W. C. Davis, Mark Boland.

20th. Potatoes, Sweet and Irish, the best mode of cultivation, selection of seed, and preservation.—W. R. Lane, John T. Peterson, G. F. Wells, L. E. Folk, Esq., Isaac Kelley.

21st. Turnips, cultivation, varieties, use, and preservation.—Honorias Sheppard, Jacob Sligh, D. F. Suber, H. G. Smith, Edward Stephens.

22d. Raising and Care of Stock.—Dr. B. S. James, H. L. Ruff, Capt. D. Raiford, Silas Ray, J. W. Suber.

23d. Rotation of Crops.—Major John P. Kinard, S. Darby, B. Rice, R. W. Clary, A. J. Sligh.

24th. Slaves, treatmentt so as best to accord with their comfort and value to their owners.—Col. W. S. Dogan, W. B. D'Oyley, Dr. D. W. Reid, John T. Duncan, J. H. Suber.

25th. Horses.—A. G. Summer, Col. J. W. Duckett, Joseph Davenport, J. H. Wells, John Boozar.

26th. Mules.—Joseph S. Reid, John A. Cannon, James Caldwell, Col. J. M Maffett, Elihu Payne.

27th. Cattle.—Wm. Summer, R. C. Dunlap, Jacob Wheeler, W. J. Bobo, Michael Wertz.

28th. Hogs.—Henry Summer, Esq., Joseph P. Summers, Jas. P. Williams, Elihu Payne.

29. Sheep.—Col. W. A. Williams, Wm. Langford, Jackson Teague.

30th. Domestic Manufacture.—Thos. P. Slider, W. W. Houseal, Isaac Bierfield, R. C. Chapman, Jesse Senn.

31st. Mechanic arts.—Levi Slawson, R. M. Stokes, C. M. Jones, A. S. Scruggs, Josiah Steward.

32d. Industry compared with Genius.—A. C. Garlington, Esq., J. M. Baxter, Esq., E. S. Bailey, J. K. Schumpert, N. A. Hunter.

33d. What ought to be the Just and True Results of Legislation.—J. C. Hope, Esq., MattheW Hall, George Turnipseed, Edmund Pasley, B. F. Green.

34th. The True Hope of South Carolina.—L. J. Jones, J. Wister Simpson, Jackson Teague, S. Muhtgomery, W. F. Norris.

Papers friendly to the cause of Agriculture, and the Newberry Agricultural Society, are requested to publish the foregoing

BY ORDER OF THE PRESIDENT.



Ladies' Department.

For the Farmer and Planter.

Letter from Lucy.

Once more, then, I am free to send you a few lines, that for want of better, may answer a purpose in keeping open the Ladies Department in your valuable paper, but if you could be induced to take that interdict off of us, the fair sex I mean, and let us write without sending *bona fide* names. Poor wee Lucy, would soon be crowded out by things far more worthy to fill our allotted space. You know, we,

the Ladies, are never held responsible for what we say, it is only the nobler (?) sex. Who was God's image for an idle bond, besides, you have the cards in your own hands, and need only publish what may seem good to you.

I felt truly grateful to you when I read your notice to the ladies, that there would be a portion of your paper given up to their use, and invited them to step forward and fill it. The idea of making the attempt myself, did not occur to me, until in several numbers. I perceived that rather than close it, your gallantry had prompted you to keep it open, with selections from other journals, showing that your kindness had not been responded to as it deserved, and needing information, I had the presumption to pen a few lines, asking it at the hands of your readers, and which I have now to thank those gentlemen for having used one of their receipts for curing bacon with complete success, and also tried upon the hams, your receipt for preserving them, after they are cured, of which time only will be the test.

And now ladies, allow me a word to you.—Mr. Seaborn has treated us as reasonable beings, deserving of some courtesey and consideration, has held out to us a channel for interchange of thought, a means of helping each other along with our personal experience in house-keeping duties, and domestic economy in general, has kindly volunteered to give up to us, a place in his *useful* paper; thereby showing that he thinks us capable of filling it worthily. Will you not meet his courtesey as it deserves, and show him that he has not overrated us. I am no advocate (but the very reverse) for women's rights conventions and that class of things, and I thank God, no Southern women are; but I firmly and strenuously advocate our filling to the best of our ability, our appointed place in the world, which is, beside the domestic hearth, woman's true province, and where her labors are ever blest. Nancy justly remarks in one of her letters, that "we could greatly assist each other, would we but impart the knowledge that each possesses."—Few indeed, are there of God's creation, who holds not at least *one* idea that could aid *some* fellow being, did we but know where to offer it. Let us then come forward and offer for the general good whatever experience, that best of teachers may have imparted to us.

— Lucy.

REMARKS.—Our ten thousand thanks are due and hereby tendered to our fair correspondent, "Lucy."—May her shadow never grow less, and may her good example be followed by every sensible lady as she is, in our good State and elsewhere. Why not ladies write for agricultural papers as well as the "noble (?) sex," are they not as capable of imparting their knowledge in this way as men? Are they not as much interested in every thing pertaining to our calling as are the "Lords." We opine that every good house-wife would blush to confess she was not, then why exclude them from our counsels? why set them down as mere playthings and not as "help mates?" for help mates they are, and as such were given us by an allwise Creator, and so considered and treated by all sensible men. Then why, we again ask, reject her counsel, why? We *shall not*. Then come in ladies, name or no name, for you are too good hearted to get us into a fight, recollect though, according to a late decision,

the Editor stands Godfather for what he publishes.—But your department yet stands open in our columns with its beautiful emblem at its head, inviting you in. Walk in then, fight or no fight, we will receive you with opened arms and no questions asked.—Ed. F. & P.

Premium List of the S. C. Agricultural Society.

In publishing the Premium List of the South Carolina Agricultural Society, the following was omitted, we now publish it by request:

For the best bale of wool, not less than three hundred pounds, washed on the sheep's back, \$20.

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THE AIR-LINE RAILROAD.

BOOKS have been opened at Pendleton, for subscriptions to this very important enterprise, and we request all persons feeling an interest in it—and who does not?—to come forward and give us their names.

GEO. SEABORN.

J. B. E. SLOAN.

W. H. D. GAILLARD.